

Historic, archived document

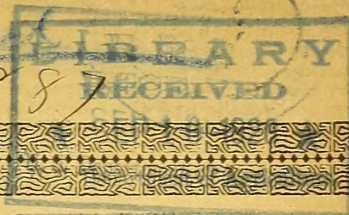
Do not assume content reflects current scientific knowledge, policies, or practices.



62.61

Published Summer 1887

Index



DESCRIPTIVE CATALOGUE

—OF—

FRUIT AND ORNAMENTAL

—TREES,—

SHRUBS, VINES, ROSES,

EVERGREENS, ETC.

FOR SALE BY

W. L. MCKAY & CO.,

GENEVA, N. Y.

GENEVA, N. Y.

W. F. HUMPHREY, PRINTER, 37 & 39 SENECA ST.

DESCRIPTIVE CATALOGUE

— OF —

FRUIT AND ORNAMENTAL

— TREES, —

SHRUBS, VINES, ROSES,

EVERGREENS, ETC.

TOGETHER WITH

VALUABLE HINTS ON PLANTING.

GENEVA, N. Y.*

W. F. HUMPHREY, PRINTER, 37 & 39 SENECA ST.

INTRODUCTORY.

All who are acquainted with the climate of the East as compared with the West, know that wheat, corn, oats, or any other crop, will make a more rapid growth in the north-western climate than in Western New York ; and the same remark will apply to the growth of trees and vegetation generally. The reasons for this difference are obvious to those who are acquainted with the climate in both sections. The clear western atmosphere, almost entirely unobstructed by mists, gives the sun a more direct power upon vegetation, thus stimulating growth, and the weather commonly remains warm there until late in the season, often far into December, so that the tree continues to grow up to that time, while in Western New York the weather is almost invariably cold and chilly during the fall months, by which growth is checked and the tender wood of the young tree slowly ripened up and prepared to endure the severe frosts of winter. With winter also comes a heavy body of snow, which is a sure protection to the roots. In the north-western climate, when winter sets in, the change is generally sudden, the mercury often falling from 40° above to 10° below zero in twenty-four hours, and the hard freezing of the immature and tender wood necessarily produces *sap blight*, the tree thus receiving its first permanent injury. The same sudden change from hot to cold, occurs for successive seasons until the tree becomes permanently diseased. We often notice, in cutting off the limbs of a western-grown fruit tree over three years old, that the blighted sap will run down and blacken and poison the bark. The result of these sudden changes, long continued, is a rotten-hearted tree, and when such trees have remained in the orchard row for a number of years, say from six to twenty, according to the progress which the disease has made, the dead wood becomes so extended from the center of the tree, that frequently, while it is loaded with fruit, the stem is broken by the wind and the tree destroyed.

If a fruit tree be grown on wet land and its cultivation neglected, it will become a diseased tree, whether grown east or west ; the disease first showing itself at the heart. This is a fact so well established we suppose none will deny it ; but it is equally certain that fruit trees grown in the north-west will become diseased in forty-nine out of fifty cases, for reasons which we have stated, nor is it in the power of man to hinder this result, since the climate is such that it cannot be otherwise.

In further confirmation of our position, let it be borne in mind that the pith of a healthy tree is pure white, and the first indication of disease is coloring of the pith, and as the disease increases the color deepens and extends from the pith outward, and the tree begins to die like other trees at the center. The process is : 1st, Coloring of the pith : 2nd, The wood becomes dry and finally decays. All this time the tree may be making wood, and to the inexperienced eye appear healthy, carrying up its sap regularly between the bark and wood, as in a healthy tree.

On the other hand, trees grown in Western New York do not make such rapid growth on account of mists in the atmosphere, partially obscuring the rays of the sun. The weather, most of the time during the fall months, is cold and raw, retarding the growth of the tree, and ripening slowly and surely the wood made during the summer, thus preparing it to resist the severe frosts of winter.

We must also bear in mind that the nurseries of Western New York are situated in the immediate vicinity of Lake Ontario, and the prevailing winds blowing from the

north-west over this large body of water and the whole chain of great lakes, passing over these nurseries, have a tendency to equalize the temperature and render it conducive to the healthy growth of timber. The cause of this equalization of temperature is, that as the waters of the great lakes are gradually growing warmer during the summer, and cooler again during the winter, the vapors rising from them in the process of cooling tend to equalize the temperature and render the climate favorable to the slow and healthy growth of timber.

The question may be asked: If the climate of the North-West is so unfavorable to the healthy growth of fruit trees, will not eastern trees, when taken there and set out in the orchard row, be equally affected by the climate? To this we answer that a tree which has attained to the age of three years in the nurseries of Western New York is in a sound and vigorous state, and if of a variety known to be hardy in the North-West it is far better prepared to resist the sudden changes, than a tree grown there, for the same tree, if set out as a graft there, would make a growth too rapid, and during the time it was changing from tender infancy to mature age, its constitution would be hopelessly impaired. These facts show conclusively that the idea of western grown fruit trees being superior to eastern is a great error; since, in the one case, we have a sound, healthy, hard wood tree whose wood has been ripened up year by year until it is able successfully to resist the changes of their fickle climate; and in the other case, we have a tree whose unripe wood has been frozen from year to year, and its sap blighted, until its constitution is impaired, and it has become a thoroughly diseased tree. From these facts we learn what experience also proves, that eastern-grown fruit trees, transplanted in the North-West, other things being equal, will make far better orchards than trees grown in western nurseries.

The almost total destruction of nearly every western nursery by past severe winters is a fact which every nurseryman in the West most deeply deplores, there being scarcely a tree but is either totally killed or so deeply diseased as to be utterly unfit for successful planting—the whole interior of the tree being black-hearted, and only a thin shell of live wood on the outside which temporarily keeps the tree alive.

ADVICE TO PLANTERS.

To the planter or purchaser of nursery stock, at least three things are indispensable; first, varieties true to name; second, healthy, vigorous, well matured trees or plants; and third, careful and judicious packing, without which all may be lost.

Select thrifty young trees in preference to old or very large ones; the roots are more tender and fibrous and they bear transplanting better and are far more apt to live, they can also be more easily trimmed and shaped to any desired form, and in the course of a few years will usually outstrip the older ones in growth.

We give the most careful scrutiny to the propagation of varieties, endeavoring by all methods known to us, to protect ourselves from error or imposition, and rejecting anything of which we have reason to feel suspicious. By such careful and constant watching and attention, we are warranted in offering our stock as pure and absolutely true to name.

We give to our packing and shipping careful personal supervision, and to still further protect our patrons as well as ourselves against loss in this direction, we employ the most skilled and competent hands to assist us.

We aim to keep fully abreast of an enlightened and cultivated taste, in the introduction of new and valuable varieties of fruit and novelties and valuable acquisitions in ornamentals—accepting with pleasure everything that has real merit, we shall with equal readiness discard and discountenance the sale of worthless humbugs.

By careful consideration of the wants of our trade and faithful attention to business, we hope to continue to merit and receive a share of the patronage of lovers and buyers of choice fruits and ornamentals.

THE SOIL.

A rich loam is the best for fruit, made sufficiently dry by artificial draining, if necessary, but all soils may be made available by judicious treatment.

PREPARATION FOR PLANTING.

Plow and subsoil repeatedly so as to thoroughly pulverize to a depth of 12 to 18 inches. When planting upon the lawn or grass plots, remove the sod for a diameter of 4 or 5 feet and keep this space well worked and free from weeds. Dig the hole deeper and larger than is necessary, to admit all the roots in their natural position, keeping the surface and subsoil separate. Cut off broken and bruised roots and shorten the tops to half a dozen good buds, except for Fall planting, when it is better to defer top pruning until the following Spring. If not prepared to plant when your stock arrives, "heel in," by digging a trench deep enough to admit all the roots, and setting the trees therein as thick as they can stand, carefully packing the earth about the roots, taking up when required. Never leave the roots exposed to the sun and air, and "puddle" before planting.

PLANTING.

Fill up the hole with surface soil, so that the tree will stand about as it did when in the nursery, after the earth has settled, except Dwarf Pears, which should be planted deep enough to cover the quince stock upon which they are budded, two or three inches. Work the soil thoroughly among the roots, and when well covered tramp firmly. Set the tree firm as a post, but leave the surface filling (of poorer soil) light and loose. No staking will be required except with very tall trees. Never let manure come in contact with the roots.

MULCHING.

A covering of coarse manure, straw, marsh hay or loose chip dirt, during the first season will effectually prevent injury from drouth and is a benefit at all times.

DAMAGED TREES.

If stock is frozen when received, place the package in a cellar and entirely bury in sand until frost is removed. If dried from long exposure, bury in the ground or keep in water until the shriveled appearance disappears.

HOW TO WINTER TREES PROCURED IN THE FALL.

The practice of procuring supplies of trees in the Fall is becoming more and more general as each season demonstrates its wisdom. It is a more favorable time than Spring, because of the colder weather, and the lighter pressure of business with nurserymen, the freighting companies and the planter. Even when Fall planting is not desirable by reason of severity of the climate, the stock may be *procured* in the Fall, and thus be on hand ready for the opportune moment in the Spring. To insure success you have only to get the trees before freezing weather, and bury them in the following manner: choose a dry spot where no water will stand during the winter, with no grass near it to invite mice. Dig a trench, throwing out enough dirt to admit one layer of roots below the surface, and place the trees in it, inclined at an angle of forty-five degrees or more. Widen the trench, throwing the soil among the roots in position; place another layer in the trench, reclining the tops on the others, and so on until all are in the trench; then finish by throwing up more soil until the tops of the trees are nearly or quite covered. It is also well to bank up the earth around the sides to insure more thorough protection. The exposed tops should then be covered with pine boughs, which insures them against any possibility of injury. Care should be taken to fill solid all the interstices among

the roots. *Too much care in doing this cannot be insisted upon, as every root which is not in close contact with the soil is sure to be killed.* In the Spring the roots will be found to have formed the granulation necessary to the production of new spongioles, and when planted at the proper time will start to immediate growth.

If the trees are frozen when received, they should be buried immediately in the earth, tops and all, and allowed to thaw in this condition.

PLANT YOUNG TREES.

We cannot too strongly recommend to our customers the procuring of young trees, especially for orchard planting, instead of selecting the largest that can be had to secure a more immediate effect. They can be taken up with more perfect roots, and will become sooner established in a new location. They can also be more readily trained to any desired shape. The largest and most successful planters invariably select young, thrifty trees as the surest in the end to give thorough satisfaction.

For small grounds or street planting, when it is necessary to make a show as soon as possible, large trees are often desirable, and when handled with care should not fail to do well; but with the general planter the average of loss will be much less, and both time and money will be saved if young trees are selected to commence with.

DISTANCES FOR PLANTING.

Standard Apples.....	30 feet apart each way.
Standard Pears and strong growing Cherries	20 " " "
Duke and Morello Cherries.....	18 " " "
Standard Plums, Apricots, Peaches, Nectarines	16 to 18 " "
Dwarf Pears and Quinces.....	10 to 12 " "
Dwarf Apples	10 to 12 " "
Grapes.....	rows 10 to 16 feet apart 7 to 16 feet in rows.
Currants and Gooseberries.....	3 to 4 feet apart.
Raspberries and Blackberries	3 to 4 by 5 to 7 apart.
Strawberries, for field culture.....	1 to 1½ by 3 to 3½ "
Strawberries, for garden culture	1 to 2 feet apart.

NOTE.—A most excellent way in planting an apple orchard 30 feet apart is to plant peaches or small fruits between. By the time the apples require the ground the others will have passed their prime and can be removed.

NUMBER OF TREES ON AN ACRE.

30 feet apart each way	50	10 feet apart each way	435
25 " "	70	8 " "	680
20 " "	110	6 " "	1210
18 " "	135	5 " "	1745
15 " "	200	4 " "	2725
12 " "	300	3 " "	4840

RULE.—Multiply the distance in feet between the rows by the distance the plants are apart in the rows and the product will be the number of square feet for each plant or hill; which divided into the number of feet in an acre (43,560), will give the number of plants or trees to the acre.

FRUIT DEPARTMENT.

APPLES.

The first fruit, both in importance and general culture, is the apple. Its period, unlike that of other fruits, extends nearly or quite through the year. By planting judicious selections of Summer, Autumn and Winter sorts, a constant succession can be easily obtained of this indispensable fruit for family use.

There is no farm crop which, on the average, will produce one-fourth as much income per acre as will a good apple orchard. As it takes from six to eight years for an orchard to come into bearing, some people hesitate to plant, regarding the time and expense as in a great measure lost. In reply to this we would quote the remarks made by O. C. Chapman, of East Bloomfield, N. Y., to J. J. Thomas. He said he considered the yearly growth of each apple tree planted in his immense orchard of over one hundred and fifty acres, to be worth fully one dollar before they commenced bearing. He has had an experience of nearly half a century, and he says that he considers this a low estimate. At fifty trees per acre, this would make a yearly increase of value of fifty dollars per acre, which, no doubt, is quite within the mark.

As fruit has become cheaper on account of the increased supply, a large and constantly increasing European trade has sprung up which affords highly remunerative prices for the best selected specimens of our orchards, while the new process of evaporation of fruit has become a recognized auxiliary to the horticulture of the land. With immense consumption by this process of evaporation, it may be doubted if apple orcharding will ever in any season be less than highly remunerative. All the surplus of orchards—all wind-falls and defective specimens—can at once be gathered and sold at a fair price to the evaporating establishments which now exist in almost every town in all fruit-growing sections.

If apples are planted at the rate of fifty trees per acre, rows of peach trees and small fruits can be planted between the apples, which, growing more quickly than the apple trees, soon protect them from the winds, and thus are a great benefit to them. After eight or ten years of productiveness, as the space is needed for apples, the peach trees and small fruits may be removed, leaving the orchard better for the protection, and at the same time having yielded the planter a large return for his trouble.

Our principal stock of apples consists of the following varieties, which have been well proved and can be recommended as the best now in cultivation.

SUMMER.

HABIT OF GROWTH	NAME AND DESCRIPTION.	SEASON
Free.	Benoni —Medium size, nearly round; deep red, with rich flavor.	Aug.
Free.	Early Harvest —Medium size, round, straw color; tender, sub-acid and fine; productive.	July & Aug.
Mod.	Early Strawberry —Medium, roundish; handsomely striped with red; excellent; productive.	Aug.
Free.	EARLY RIPE —A large yellow apple, ripening with or immediately after the Early Harvest; a popular market fruit.	Aug.
Vig.	Golden Sweet —Large, pale yellow, very sweet and good; good bearer.	Aug.

HABIT OF GROWTH	NAME AND DESCRIPTION.	SEASON
Vig.	Keswick Codlin —Large, tender, acid, juicy; excellent for cooking; productive, and early in bearing.	Aug. & Sept.
Mod.	Primate —Above medium, straw color, tinged with blush; tender, juicy and sub-acid; abundant bearer; an excellent dessert variety.	Aug. & Sept.
Free.	Red Astrachan —Large, roundish, nearly covered with deep crimson, overspread with a thick bloom; juicy, rich, acid, beautiful; a heavy and regular bearer; good everywhere.	July.
Free.	Sweet Bough —Large, pale greenish yellow; tender and sweet; good bearer.	Aug.
Free.	Sops of Wine —Medium size, red; flesh white, often stained; mild and pleasant; productive.	Aug. & Sept.
Mod.	Totofsky —A Russian apple, profitable for market growing; bears extremely early, usually the second year after transplanting, and bears every year; hardy as a crab; fruit good size, yellow, beautifully striped with red; juicy, pleasant, acid, aromatic.	July & Aug.
Mod.	Williams' Favorite —Above medium size, deep red; mild and agreeable; good bearer. Very highly esteemed in Massachusetts.	July & Aug.
Mod.	YELLOW TRANSPARENT (Russian Transparent)—A very early Russian apple, of good quality and decided merits; an extremely early, regular and abundant bearer; size medium; color pale yellow; sprightly sub-acid; great bearer.	July.
AUTUMN.		
Mod.	Alexander (Emperor Russian)—Large, deep red or crimson; flesh yellowish white, crisp, tender, with pleasant flavor. Very hardy.	Oct.
Vig.	Chenango Strawberry (Sherwood's Favorite)—Large, oblong; color whitish, shaded, splashed and mottled with light and dark crimson; flesh white, tender and juicy.	Sept. & Oct.
Vig.	DUCHESS OF OLDENBURG —Russian; large size; skin yellow, streaked with red, and somewhat blushed, sometimes with a faint blue bloom; flesh juicy and good, with a rich, sub-acid flavor; productive. Succeeds well in nearly all sections of the country, and is as valuable in the extreme north as in the south; is full as hardy as any variety known.	Sept.
Free.	Gravenstein —Large, striped and beautiful; tender, juicy and high flavored; productive.	Sept. & Oct.
Free.	Jersey Sweet —Medium, striped red and green; very rich, sweet and pleasant; good bearer.	Sept. & Oct.
Free.	Lowell —Large, roundish, slightly conical, green, becoming rich yellow; surface oily, flesh yellowish white, sub-acid, excellent; good bearer.	Sept. & Oct.
Free.	Maiden's Blush —Rather large, oblate, smooth, regular, with a fine, evenly shaded red cheek or blush on a clear, pale yellow ground; flesh white, tender, sprightly, with a pleasant, sub-acid flavor; bears regularly and abundantly.	Sept. & Oct.
Mod.	Peach (Irish Peach)—Medium size, round or a little flattened; yellowish green, streaked with brownish red. Flesh white, tender and juicy. Tree very hardy; highly prized in the extreme north.	Sept.
Slow.	Porter —Rather large, regular, oblong, tapering to the eye; skin bright yellow, sometimes a dull blush in the sun; flesh tender, sub-acid, rich, sprightly flavor; fair and productive.	Sept. & Oct.
Vig.	RED BIETIGHEIMER —A rare and valuable German variety. Fruit large to very large, roundish, inclining to conical; skin pale, cream colored ground, mostly covered with purplish crimson; flesh white, firm, sub-acid, with a brisk, pleasant flavor. Tree a free grower and abundant bearer. This is one of the largest and handsomest apples.	Sept.
Free.	St. Lawrence —Large, yellowish, streaked and splashed with carmine; flesh white, slightly stained, crisp, juicy, tender and vinous; tree hardy and productive.	Sept. & Oct.

HABIT OF GROWTH	NAME AND DESCRIPTION.	SEASON
LATE FALL AND EARLY WINTER.		
Free.	Clark's Orange —New Iron Clad. Originated in Pewaukee, Wis. Fruit medium to large, nearly round like an orange; skin yellow, covered partially with vermilion and carmine, striped; very smooth and beautiful; flesh white, juicy, sub-acid. Good for dessert or cooking.	Nov. to Jan.
Vig.	Fall Orange —Large size, nearly round; yellow, sometimes a little dull red; rather acid; excellent for cooking; a very early and abundant bearer.	Oct. & Nov.
Free.	Fall Pippin —Very large, yellow; tender, juicy and rich; fine in all localities.	Oct. to Dec.
Mod.	Fameuse (Snow Apple)—Medium size, roundish, very handsome; deep crimson; flesh snowy white, tender, juicy, high flavored and delicious. Tree productive and very hardy.	Nov. to Jan.
Vig.	Haas —Medium to large, slightly conical and somewhat ribbed; pale greenish yellow, shaded and striped with red; flesh fine white, sometimes stained, tender, juicy, sub-acid, good; bears early and abundantly.	Oct. & Nov.
Vig.	Hurlbut —Fruit medium size, oblate, angular; skin yellow with red stripes, and splashed with red; flesh white, crisp, tender, juicy, sub-acid; quality very good. A great bearer.	Oct. to Dec.
Vig.	Munson Sweet —Medium to large, pale yellow with red cheek; tender, rich and good; fine bearer.	Oct. to Jan.
Free.	Pound Sweet —Very large, roundish; skin smooth, pale green, becoming yellow next to the sun; flesh white, sweet, rich and tender; valuable for baking.	Sept. to Nov.
Vig.	Rambo —Medium, yellowish, streaked with dull red and somewhat dotted; mild, tender, good and productive.	Oct. to Dec.
Mod.	Rome Beauty —Large, yellow, shaded with bright red; flesh yellowish, tender, juicy, sub-acid.	Oct. to Dec.
Vig.	Smokehouse —Large, yellow, shaded with bright red; flesh firm, crisp, juicy and fine flavored.	Oct. to Feb.
Mod.	STUMP —A well-tried apple, but recently introduced to the public. Of good size, conical; flesh firm, crisp, juicy, tender, sprightly sub-acid; greenish yellow, shaded with red. Beautifully fair, and has commanded the very highest prices wherever shown. A heavy bearer.	Oct. to Nov.
Mod.	Twenty Ounce (Cayuga Red Streak)—Very large, nearly round; yellow, striped with red; quality good; good bearer; popular as a market variety.	Nov. & Dec.
Mod.	Victoria Sweeting —Fruit medium, oblate; skin entirely covered with light and dark crimson, sometimes with obscure splashes of a darker hue, and with conspicuous yellow dots; flesh whitish, tender, juicy, sweet; very good. Very productive on alternate years.	Oct. & Nov.
WINTER.		
Vig.	American Golden Russet —Medium or small, roundish ovate; clear golden russet; very tender; juicy, rich; good bearer, very hardy.	Jan. to May.
Mod.	Bailey's Sweet —Fruit large, roundish conical, mottled and striped with deep red; flesh yellow and tender, with a mild, rich, sweet flavor.	Nov. to Mar.
Vig.	Baldwin —Large, roundish; deep bright red; juicy, crisp, sub-acid, good flavor; very productive of fair, handsome fruit; one of the most popular and profitable Winter apples.	Jan. to April.
Vig.	BELLE DE BOSKOOP —A new sort, of Russian origin, comes into bearing early and produces abundant crops. Fruit good size; skin yellow, shaded with light and dark red over nearly the whole surface; flesh crisp, tender and juicy; flavor brisk sub-acid and of very good quality.	Feb. to April.
Vig.	Ben Davis (New York Pippin, Kentucky Streak, etc.)—Large, handsome, striped and of good quality; productive; a late keeper; highly esteemed as one of the most profitable market varieties.	Dec. to Mar.

HABIT OF GROWTH	NAME AND DESCRIPTION.	SEASON
Mod.	Clermont —Fruit medium to large, somewhat irregular; skin smooth, except where russet prevails; rich orange yellow in the sun, sometimes shaded with red; flesh firm till fully ripe; mild sub-acid and very good.	Jan. to May.
Free.	Cooper's Market —Medium size, conical; shaded and striped with red on yellow; flesh white and tender, with a brisk sub-acid flavor; hardy and productive.	Dec. to May.
Vig.	DICKINSON —A new and valuable seedling of Yellow Bellflower, from Chester Co., Pa. Has proved itself to be an early, abundant and annual bearer. Fruit large, conical, of a rich red color over a yellow ground, streaked with deep red. Hangs well on the tree.	March.
Free.	English Russet —Fruit medium size, very regular; slightly conical; pale greenish yellow, about two-thirds covered with russet; flesh yellowish white, firm and crisp, with pleasant, slightly sub-acid flavor.	Jan. to June.
Vig.	EWALT —A fine, showy apple; very large, roundish, slightly conical; bright yellow, shaded with crimson on the sunny side; flesh white, tender, brisk, sub-acid. Without exception the strongest and finest grower of all apples.	Nov. to Mar.
Vig.	Fallawater (Tulpehocken, Pound, etc.)—A very large, dull red apple, of good quality; productive.	Nov. to Mar.
Free.	Grimes' Golden (Grimes' Golden Pippin)—An apple of good quality, medium to large size; golden yellow, productive.	Jan. to April.
Mod.	Hendrick Sweet (Sweet Winesap)—Fruit medium, roundish oblate; color red, splashed with deep crimson; flesh tender, juicy, very sweet, rich.	Nov. to Mar.
Free.	Hubbardston Nonsuch —Large, striped yellow and red; tender, juicy and fine. Good bearer.	Nov. to Jan.
Mod.	Jonathan —Fruit medium or small, roundish; skin yellow, nearly covered with dark or lively red; fine grained, very tender and finely flavored.	Nov. to April.
Vig.	King (Tompkins County)—Large and handsome; striped red and yellow; productive; one of the best.	Dec. to Mar.
Mod.	Ladies' Sweet —A large, handsome, red apple; juicy, sweet and good.	Dec. to May.
Slow.	Lady Apple —A beautiful little dessert fruit; flat, pale yellow, with a deep red cheek; juicy, rich and pleasant. A heavy bearer, and brings the highest price of any apple in the city markets.	Nov. to May.
Vig.	LANKFORD SEEDLING —Originated in Kent Co., Md. An annual bearer of very fine, showy fruit; size medium to large, roundish oblate; color yellow, striped and nearly covered with bright red; flesh firm, juicy, mild sub-acid; one of the best late keepers.	Jan. to May.
Free.	LONGFIELD —One of the Russian varieties imported by the government through the department of Agriculture in the winter of '69 and '70 together with the Yellow Transparent and others, and the only one of the entire importation, so far as known, that is a winter apple. Tree a free, upright grower and an early and abundant bearer; fruit medium to large, conical; color a yellowish green thickly covered with red stripes and a decided blush on the sunny side; flavor a rich, sprightly sub-acid.	Dec. to May.
Vig.	Mann —New. An upright grower, forming a round head; fruit medium to large, roundish, oblate; skin deep yellow when fully ripe, with sometimes a shade of brownish red where exposed; flesh yellowish, juicy, mild, pleasant, sub-acid; good to very good. Will keep as long as Roxbury Russet.	May to June.
Free.	McINTOSH RED —Originated in Ontario some twenty years since, but not widely known. Tree very hardy, long lived; good annual bearer of fair, handsome fruit of excellent quality, for home or market use. Fruit above medium, roundish, oblate; skin whitish yellow, very nearly covered with dark rich red or crimson, almost purplish in the sun; flesh white, fine, very tender, juicy, mild, sub-acid; very promising.	Nov. to April.

DESCRIPTIVE CATALOGUE OF

HABIT OF GROWTH	NAME AND DESCRIPTION.	SEASON
Vig.	MILDING —Fruit large, skin smooth, light yellow splashed with bright rich red nearly over whole surface; flesh tender, juicy, sprightly, sub-acid. One of the hardest and very productive.	Dec. to Feb.
Slow.	Newtown Pippin —One of the very best apples as to quality, in those sections where it succeeds. Very juicy, crisp and highly delicious flavor; requires manure for the best fruit; a fine keeper and very valuable for shipping abroad.	Dec. to May.
Vig.	Nickajack —A large, roundish, striped apple of fair quality; very hardy and productive; popular in the south.	Dec. to April.
Vig.	Northern Spy —Large, roundish, slightly conical, somewhat ribbed; striped, with the sunny side nearly covered with purplish red. Flesh white and tender, with a mild sub-acid, rich and delicious flavor. The tree should be kept open by pruning, so as to admit the air and light freely.	Jan. to May.
Vig.	Parson's Sweet —Origin, Massachusetts; a beautiful, conical, red striped sweet apple; a long keeper, firm and of high quality.	Dec. to May.
Mod.	Peck's Pleasant —Large, pale yellow, very tender and rich, with a Newtown Pippin flavor. Fine bearer and good keeper.	Nov. to Mar.
Vig.	Pewaukee —A seedling from Duchess of Oldenburg. Fruit medium to large, roundish, oblate; skin bright yellow; striped and splashed with dark red, and overspread with whitish dots; flesh white, tender, juicy; sub-acid. Especially esteemed for cold climates on account of its hardness.	Jan. to June.
Mod.	Rawle's Janet (Never Fail)—Medium, roundish, ovate; greenish yellow, striped with red; crisp, rich and juicy; one of the best and longest keepers in the south and south-west.	Feb. to May.
Vig.	Rhode Island Greening —Large, greenish yellow; tender, juicy and rich, with rather an acid flavor; an abundant bearer.	Dec. to April.
Free.	Rubicon —Very hardy and valuable for the north. Fruit roundish, above medium in size; yellow, mostly covered with bright rich red; flesh yellowish and firm, juicy, brisk sub-acid; very good.	Feb. & Mar.
Vig.	Russet, Roxbury or Boston —Medium to large; greenish or yellow russets; crisp, good, sub-acid flavor; productive. Very popular on account of its long keeping.	Jan. to June.
Free.	SALOME —Tree a strong grower; equals Wealthy in hardness; holds its fruit firmly, even against strong wind-storms; an early and annual bearer, although a heavier crop on alternate years; fruit of medium and uniform size; quality very good, which it retains even into Summer; claimed to have been kept in excellent condition until October.	Feb. to June.
Mod.	Seek-no-Further (Westfield)—Medium to large; slightly russeted, with dull red stripes; tender, rich, spicy and fine. Good bearer.	Nov. to Feb.
Mod.	Smith's Cider —A handsome fruit, large, oblong, somewhat flattened; skin yellow, changing to red; flesh tender, juicy, crisp, with pleasant sub-acid flavor.	Dec. to Mar.
Mod.	Spitzenberg, Esopus —Medium to large; deep red; flesh yellow, crisp, sub-acid, high flavored with high culture. A good bearer and popular variety.	Nov. to April.
Free.	Stark —A long keeper and valuable market fruit. Fruit large, roundish; skin greenish yellow, shaded and striped with light and dark red nearly over the whole surface and thickly sprinkled with light brown dots; flesh yellowish, moderately juicy, mild, sub-acid.	Jan. to May.
Vig.	SUTTON BEAUTY —Fruit medium or above; roundish oblate conic; waxen yellow, shaded, mottled and obscurely striped with fine crimson; flesh whitish, crisp, tender, juicy; sprightly sub-acid.	Nov. to Feb.
Mod.	Swaar —Large, pale lemon yellow, with dark dots; tender, with a mild, rich, agreeable flavor; one of the best.	Nov. to May.
Free.	Tallman Sweet —Medium, pale yellow, slightly tinged with red; firm, rich and very sweet. An excellent baking apple; productive.	Nov. to April.

HABIT OF GROWTH	NAME AND DESCRIPTION.	SEASON
Vig.	TEWKESBURY WINTER BLUSH —Small; yellow, with a red cheek; flesh firm, juicy and fine flavored; keeps until late in spring.	Jan. to July.
Free.	Vandevere —Medium; yellow ground; flesh light yellow, rich, sub-acid flavor; early bearer.	Dec. to Feb.
Vig.	Wagner —Medium to large; deep red in the sun, flesh firm; sub-acid and excellent; very productive; bears very young; quality good.	Dec. to May.
Vig.	Walbridge —Fruit medium size, handsome, striped with red; quality good. Productive, hardy.	Jan. to May.
Vig.	WEALTHY —Originated in Minnesota; healthy, hardy, and very productive. Fruit medium, oblate, skin smooth, whitish yellow, shaded with deep red in the sun, splashed and spotted in the shade; flesh white, fine, tender, juicy, lively, sub acid; very good. A very heavy and early bearer.	Nov. to Jan.
Vig.	Western Beauty —Fruit roundish oblate, conical, very large; greenish yellow, nearly covered with pale dull red, striped with darker shade; flesh greenish white, not firm, tender, mild, sub-acid, good.	Nov. to Feb.
Free.	Winesap —Medium, dark red; sub-acid, excellent; abundant bearer. A favorite market variety in the west.	Dec. to May.
Vig.	WOLF RIVER —Very large; beautiful red in the sun on a yellow ground; strong grower and a good bearer. Original tree in Wisconsin is 30 years old, very healthy and extremely hardy.	Dec. to Feb.
Free.	Yellow Bellflower —Large yellow, with red blush; very tender, juicy, sub-acid; in use all winter.	Nov. to Mar.
Vig.	York Imperial —Medium, oblate; white, shaded with crimson; flesh firm, crisp, juicy and sub-acid. A good bearer and keeper; a popular Pennsylvania apple.	Dec. to Feb.

SPECIAL LIST NO. 1.

EXTRA HARDY APPLES.—In the northern part of the United States and the adjoining portions of Canada, the opinion has until recently prevailed, that no varieties of apples excepting the crabs, could be successfully grown. While this is true of most of the old varieties, a few Russian apples and hardy American seedlings have been introduced which though they require better care than that under which the crabs will thrive, have proved themselves equally as hardy. The varieties on the following list we rank with the Duchess of Oldenburg in point of hardiness, and consider the fruit of many of them better than the Baldwin. With each variety we give the origin and season of ripening.

YELLOW TRANSPARENT.....	Russia.....	July
TETOFISKY.....	Russia.....	July and August
DUCHESS.....	Russia.....	September
PEACH.....	Ireland.....	September
HAAS.....	St. Louis.....	October and November
WEALTHY.....	Excelsior, Minn.....	November to January
WOLF RIVER.....	Wolf River, Wis.....	December to February
LONGFIELD.....	Russia.....	December to March
MILDING.....	Alton, N. H.....	January and February
RUBICON.....	Pawpaw, Mich.....	February to March
PEWAUKEE, Seedling of Duchess.....	Pewaukee, Wis.....	January to May
MC INTOSH.....	Dundela, Canada.....	February to April
BELLE DE BOSKOOP.....	Russia.....	February to April
SALOME.....	Ottawa, Ill.....	February to June

SPECIAL LIST NO. 2.

HARDY APPLES—The following list of varieties we rate as hardy, in comparison with the Baldwin. They will grow in sections along the St. Lawrence and in central Maine,

New Hampshire and Vermont, where the Baldwin either winter kills outright or leads a very precarious existence. For convenience we include in the list the "Extra Hardy" varieties, which are valuable for all sections.

Yellow Transparent.....	July	Wolf River.....	Dec. to Feb.
Tetofsky.....	July and Aug.	Milding.....	Jan. and Feb.
Red Astrachan.....	July and Aug.	Yellow Belleflower.....	Nov. to Mar.
Benoni.....	Aug.	Ben Davis.....	Dec. to Mar.
Golden Sweet.....	Aug.	Longfield.....	Dec. to Mar.
Keswick Codlin.....	Aug. and Sept.	Rubicon.....	Feb. to Mar.
Duchess of Oldenburgh.....	Sept.	Talman Sweet.....	Nov. to Apr.
Peach.....	Sept.	Grimes' Golden.....	Jan. to Apr.
Red Bietigheimer.....	Sept.	Belle de Boskoop.....	Feb. to Apr.
St. Lawrence.....	Sept. and Oct.	McIntosh Red.....	Feb. to Apr.
Alexander.....	Oct.	Northern Spy.....	Jan. to May
Haas.....	Oct. and Nov.	Stark.....	Jan. to May
Stump.....	Oct. and Nov.	Pewaukee.....	Jan. to May
Hurlbut.....	Oct. to Dec.	Walbridge.....	Jan. to May
Twenty Ounce.....	Nov. and Dec.	American Golden Russet.....	Jan. to May
Fameuse.....	Nov. to Jan.	English Russet.....	Jan. to June
Wealthy.....	Nov. to Jan.	Salome.....	Feb. to June
Clark's Orange.....	Nov. to Jan.	Mann.....	May and June
Sutton Beauty.....	Nov. to Feb.		

SOUTHERN AND WESTERN WINTER APPLES.

The selection of varieties is a matter of the greatest importance, especially so with southern planting. Varieties which in the north are late keepers, when grown in the south or west often ripen in the fall. The result is the impression in the public mind, that the cause of these sorts ripening in the fall is, that the tree was grown in a northern nursery. The spot where the tree has been propagated, however, makes no difference with its season of ripening, but the place of *origin of the variety* has everything to do with it. For example take a King apple tree from a nursery in Georgia, and another from a New England nursery; plant the two trees side by side in Delaware, and both will produce a fruit ripening in October. Plant the same trees in Western New York, and the result will be a good winter fruit. Hence the importance to southern planters of selecting for their winter apples varieties of southern origin. The same remarks are applicable to those parts of the west where the seasons are long and hot.

The following varieties have proved late keepers in the south, most of them having originated there. The season of ripening given in the list, is when they mature in the south.

Grimes' Golden.....	Dec.	Nickajack.....	Dec. to Apr.
Haas.....	Dec.	Cooper's Market.....	Dec. to May
Fallawater.....	Nov. to Feb.	Winesap.....	Dec. to May
Smith's Cider.....	Nov. to Feb.	Lankford Seedling.....	Jan. to May
York Imperial.....	Dec. to Feb.	Rawle's Janet.....	Jan. to May
Ewalt.....	Nov. to Mar.	Stark.....	Jan. to May
Ben. Davis.....	Dec. to Mar.	Tewkesbury Winter Blush.....	Feb. to July
Dickinson.....	Mar.		

CRAB APPLES.

A profitable fruit for market, coming into bearing very early — frequently in two years from bud — bearing every year, and always meeting with ready sale. Some of the varieties are not only good for culinary purposes, but are especially desirable for table use on account of their beautiful appearance, their delicate texture, and their delicious flavor.

There are several points to which we wish to call attention, and on which we base our recommendation of these hardy fruits.

1st. They can be planted on any kind of soil, and in the most exposed situations, with perfect safety.

2d. They will stand the severity of the changes of the coldest weather.

3d. They will come into bearing very early, often in the second year from planting, and bear every year.

4th. They are very productive, giving large crops of beautiful fruit.

5th. They are unequalled for cider or vinegar.

6th. Some of them are pre-eminently dessert fruits, being of superior quality and strikingly handsome.

7th. They can be dried, cooked, canned or preserved with the skin on, saving a great amount of trouble.

8th. The size of the fruit varies from $1\frac{1}{2}$ to $2\frac{1}{2}$ inches in diameter, being large enough to quarter and core for drying, etc.

9th. The tree is very ornamental, in spring giving a fine show of beautifully shaded blossoms, and in the fall heavy clusters of richly colored fruit.

The following are the most valuable varieties.

HABIT OF GROWTH	NAME AND DESCRIPTION.	SEASON
Vig.	Bailey's Crimson —Fruit large, roundish; skin yellow, shaded over the whole surface with deep, rich crimson, covered with a light bloom; flesh yellow, juicy, sub-acid.	Sept.
Vig.	Gen'l Grant —Tree a vigorous and upright grower; fruit large, round, red to very dark red; flesh white, tender, mild sub-acid; excellent for dessert, and one of the best crabs introduced.	Oct.
Vig.	Hesper Rose —A good bearer; fruit a little smaller than General Grant, equally good.	Nov. to Jan.
Vig.	Hyslop —Almost as large as Early Strawberry Apple; deep crimson; very popular on account of its large size, beauty and hardiness.	Oct. to Jan.
Vig.	Marengo —(No. 1.)—Fruit large; yellow, shaded with bright red; flesh white and juicy; mild sub-acid.	Jan. to May.
Vig.	Martha —A new variety; a seedling of the Duchess of Oldenburg, introduced by the same person who originated the Wealthy. Resembles the Transcendant, but larger; a beautiful, showy fruit and bears enormously. All things considered, we doubt if it has an equal among the crabs.	Sept. & Oct.
Vig.	Montreal Beauty —Fruit large; bright yellow, mostly covered and shaded with rich red; one of the most beautiful of all Crabs in appearance; flesh yellowish, rich, firm and acid; very good.	Oct. & Nov.
Mod.	Orange —An annual and abundant bearer. Fruit larger than Transcendant. Flesh firm, crisp, juicy and delicious.	Oct. to Dec.
Vig.	Transcendant —Skin yellow, striped with red; flesh, crisp and juicy. An early and heavy bearer. One of the best known varieties.	Sept. & Oct.
Vig.	Van Wyck Sweet —An exceedingly valuable variety. Fruit very large; skin yellowish white, colored light red, and covered with bloom; flesh yellowish white; very sweet and tender; small core.	Oct. & Nov.
Vig.	Whitney's Seedling (No. 20)—Large, glossy green, striped, splashed with carmine; flesh firm, juicy and flavor very pleasant; ripe latter part of August. Tree a great bearer and very hardy; a vigorous, handsome grower, with a dark green, glossy foliage.	Aug.

PEARS.

The cultivation of this noble fruit is extending as its value is appreciated. The range of varieties is such that, like apples, they can be had in good eating condition from August until early Spring.

The melting, juicy texture, the refined flavor, and the delicate aroma of the Pear, give it rank above all other fruits except the grape.

But the Pear, like most things highly desirable and valuable, cannot be had without attention, labor and skill. The relative price of the Apple and Pear being about as one to ten, shows at the same time the superior value of the latter, and the greater skill required to bring it to perfection.

One of the most important points in the management of Pears, is to gather them at the proper time.

Summer Pears should be gathered at least ten days before they are ripe, and Autumn Pears at least a fortnight. Winter varieties, if they will hang so long, may be left until the leaves begin to fall.

At the present time the demand is for choice fruit; inferior fruit brings scarcely a remunerative price, but the best will always pay well. Pears should have the best kind of cultivation; the fruit should be thinned so as not to over-produce. Care should be used in selecting for market only the best specimens, and with such effort and system on the part of the grower, there will always come a satisfactory profit.

The pear succeeds on most soils, but does best on a rather heavy loam. Budded on its own stock, it makes a standard tree, and on the French or Angers Quince, a dwarf; the former being best adapted to large, permanent orchards, the latter (requiring garden culture and severe pruning every year), to smaller orchards, fruit yards and gardens.

Dwarfs MUST ALWAYS be planted SUFFICIENTLY DEEP to cover the junction of the Pear and Quince two or three inches. The soil must be rich and well tilled, and about one-half of the previous summer's growth cut off each Spring. Under this treatment, Dwarfs are everywhere successful. The side branches should not be removed higher than one foot from the ground in Dwarfs, while Standards may be trimmed to the height desired. Train in pyramidal form. Ripen the fruit in the house. Gather when, on gently lifting the fruit, the stem will readily separate from the limb. Place in a dark room until fully matured. Winter pears may hang on the trees until there is danger from frost, then place in a dry cellar for maturing.

The letters "D" and "S" appended to the descriptions of varieties, indicate favorable growth either as "Dwarfs" or "Standard" or both. Those designated as "moderate growers" are usually smaller trees.

SUMMER.

HABIT OF GROWTH	NAME AND DESCRIPTION.	SEASON
Vig.	Bartlett —Large size, with often a beautiful blush next the sun; buttery, very juicy and high flavored; bears early and abundantly; very popular. D. and S.	Aug. & Sept.
Mod.	Beurre Giffard —An excellent variety; medium; greenish yellow, red in the sun; very early; very productive. D. and S.	Aug.
Free.	Bloodgood —Medium; yellow, touched with russet; rich and delicious; first quality. D. and S.	Aug.
Vig.	Brandywine —Above medium, yellowish green; melting, sweet; productive. D. and S.	Aug.

HABIT OF GROWTH	NAME AND DESCRIPTION.	SEASON
Mod.	Chambers' (Early Harvest or Kentucky)—Fruit medium to large; rich, golden yellow, with red cheek toward the sun, thickly covered with gray dots. D. and S.	Aug.
Vig.	Clapp's Favorite —Very large; yellowish green to full yellow when ripe, marbled with dull red in the sun, and covered with small russet specks; vinous, melting and rich. Should be gathered early. D. and S.	Aug.
Vig.	Doyenne d'Ete —Scarcely medium size; yellowish, with a fine blush; juicy, sugary and rich; very early; fine on quince. D. and S.	Aug.
Vig.	Lawson (Comet)—A new and very early variety for market. Its quality is good for so early a sort and in beauty it probably surpasses any other pear. Large size and a heavy bearer. Color a golden yellow overspread with a bright rich crimson. D. and S.	Aug.
Vig.	Le Conte —A cross between the Chinese Sand Pear and some other variety unknown. Of remarkable vigor and beauty of growth. The fruit is bell shaped, of a rich, creamy yellow when ripe; very smooth and fine looking and ships well. Greatly esteemed in some parts of the South. D. and S.	Aug.
Vig.	Manning's Elizabeth —Small to medium; bears in clusters; crimson and gold color; very beautiful, melting, rich, sugary, sprightly, perfumed flavor; excellent; very productive. One of the best early pears. D. and S.	Aug.
Free.	Osband's Summer —Medium, yellow with red cheek; half melting, mild and pleasant; fine flavor and excellent; productive. D. and S.	Aug.
Vig.	Tyson —Medium size, bright yellow; cheek shaded with reddish brown, buttery, very melting; flavor nearly sweet, aromatic, excellent. D. and S.	Aug.

AUTUMN.

Free.	Belle Lucrative —A fine, large pear, yellowish green, slightly russeted; melting and delicious; productive. One of the best Autumn pears. D. & S.	Sept. & Oct.
Mod.	Beurre Bosc —A large, fine pear, russet yellow, slight brownish red in the sun; flesh white, melting, juicy, sweet, perfumed; productive. S.	Sept. & Oct.
Mod.	Beurre Clairgeau —Large; skin yellow, inclined to fawn, shaded with orange and crimson, covered with russet dots; flesh yellow, buttery, juicy, somewhat granular, with a sugary, perfumed, vinous flavor. The size, early bearing, productiveness and exceeding beauty, renders this a valuable sort. Best as standard.	Oct. to Dec.
Vig.	Beurre d'Anjou —Large, greenish, sprinkled with russet, sometimes shaded with dull crimson; flesh whitish, buttery, melting, with a high, rich, vinous, excellent flavor; very productive; succeeds well on the quince; should be in every orchard. D. and S.	Oct. to Dec.
Free.	Beurre Diel —Large, dull yellow, dotted; sugary, rich and delicious. D. and S.	Oct. to Dec.
Vig.	Buffum —Medium size, yellow, somewhat covered with reddish brown and russet; buttery, sweet and excellent. D. and S.	Sept. & Oct.
Vig.	Doyenne Boussock —Large, lemon yellow, a little russet; melting, juicy, with a sprightly, vinous flavor. S.	Sept.
Vig.	Duchesse d'Angouleme —Very large, dull greenish yellow, streaked and spotted with russet; flesh white, buttery and very juicy, with a rich and very excellent flavor. Best as Dwarf.	Oct. & Nov.
Vig.	Flemish Beauty —Large, beautiful, juicy, melting, rich and fine; good bearer; hardy everywhere. D. and S.	Sept. & Oct.
Free.	Frederick Clapp —Above medium; lemon yellow, sprightly, aciduous, rich. D. and S.	Oct. & Nov.
Free.	Goodale —This hardy pear originated at Saco, Maine. Fruit large, flesh white, juicy, melting, of excellent flavor and quality. Tree hardy and upright in growth, and uniformly productive; a valuable acquisition. D. and S.	Oct.

HABIT OF GROWTH:	NAME AND DESCRIPTION.	SEASON
Vig.	Howell —Large, light, waxen yellow, with a fine red cheek; handsome, rich, sweet, melting, perfumed aromatic flavor. An early and profuse bearer. Very hardy and valuable. D. and S.	Sept. & Oct.
Vig.	Kieffer's Hybrid —Tree has large, dark green, glossy leaves and is of itself very ornamental; is an early and very prolific bearer. The fruit is large, of good quality, wonderfully showy and valuable for market. It never rots at the core and is of great value as a canning variety. D. and S.	Oct. to Dec.
Vig.	Louise Bonne de Jersey —Rather large; greenish yellow, with a bright red cheek; juicy, buttery and melting; excellent; very productive. Best as dwarf.	Sept. & Oct.
Vig.	Onondaga (Swan's Orange)—A very large, melting and highly flavored yellow pear; productive. D. and S.	Oct. & Nov.
Mod.	Rutter —Fruit medium to large, and nearly globular; skin rough, greenish yellow, sprinkled with russet; flesh white, moderately juicy, nearly melting, sweet, slightly vinous; good bearer. Very good. D. and S.	Oct. & Nov.
Mod.	Seckel —Small; skin rich yellowish brown with a deep brownish red cheek; flesh very fine grained, sweet, exceedingly juicy, melting, buttery; the richest and highest flavored pear known. D. and S.	Sept. & Oct.
Vig.	Sheldon —Large size; yellow on greenish russet, with a richly shaded cheek; flesh a little coarse, melting, juicy, with a very brisk, vinous, highly perfumed flavor; productive. S.	Oct.
WINTER.		
Mod.	Beurre Easter —Large; yellow, sprinkled with brown dots, often dull red cheek; quality good. One of the best winter pears. Best on quince. D.	Dec. to Feb.
Mod.	Dana's Hovey —Small size; color yellowish russet; flesh yellowish white, juicy, melting, with a sugary, rich, aromatic flavor, too small for a market variety, but as an amateur sort, most desirable. S.	Nov. & Dec.
Free.	Duchess de Bordeaux —Large size, with a very thick, tough skin, which renders it a most valuable keeper for winter use; flesh melting, juicy, rich. S.	Dec. to Mar.
Free.	Josephine de Malines —Medium, yellow, slightly russet; flesh buttery, juicy and sweet; a fine keeper; productive. S.	Dec. to Mar.
Free.	Lawrence —Rather large; yellow, covered with brown dots; flesh whitish, slightly granular, somewhat buttery, with a very rich, aromatic flavor, unsurpassed among the early winter pears; succeeds well on the quince; ripens with little care; should be in every orchard; tree healthy, hardy and productive. D. and S.	Nov. to Jan.
Free.	Mt. Vernon —Medium size; light russet, reddish in the sun; flesh yellowish, juicy and aromatic; early bearer. A very good late pear. D. and S.	Dec.
Free.	President Drouard —A very good looking and large winter pear, with a delicate and abundant perfume; melting and juicy. D. and S.	Mar. to May.
Vig.	Vicar of Winkfield (Le Cure)—Large, long; not first quality, but desirable for its productiveness. Growth slender and straggling. D. and S.	Nov. to Jan.
Mod.	Winter Nelis —Medium size; yellowish green and russet; fine grained, melting, rich and delicious; one of the best winter pears; very productive. S.	Dec.

PLUMS.

ON PLUM STOCK.

The Plum tree, like the Pear and other finer fruits, attains its greatest perfection on our heavy soil, being entirely free from "black knot" or other disease. Trees growing in grass and culture neglected, are liable to this "black knot;" good, thorough, clean cultivation, keeping the trees constantly in a thrifty, growing state, is an almost sure preventative.

The curculio, a small, dark brown beetle, often stings the fruit, causing it to drop off; but the following directions, faithfully observed, will secure a good crop of this splendid fruit everywhere. As soon as the blossoms are fallen, spread two sheets under the tree, and give the tree a sudden jar, by striking a smart blow with a hammer upon the stub of a limb, sawed from the tree for the purpose; the insects will drop on the sheets and can be killed. Collect all the fallen fruit, and burn or feed to swine. This operation should be repeated every day, or better still, twice a day, until the fruit has attained full half its size. This should be done early in the morning, and if done twice a day, go over them the second time about 4 P. M. Instead of striking the stub of a limb, a board, padded on one side, may be placed against each limb, and the board struck with a mallet. The insects and fallen fruit should be collected in the sheet and burned. By fastening stretchers to the two ends of each sheet, the work may be facilitated. The cost of protecting a large orchard from the attacks of this enemy, will not exceed ten cents per tree for the entire season.

HABIT OF GROWTH	NAME AND DESCRIPTION.	SEASON
Vig.	Bleecker's Gage —Above medium, yellow; juicy and rich; productive.	Last of Aug.
Vig.	Bradshaw —Fruit very large, dark violet red; flesh yellowish green; juicy and pleasant; very productive.	Middle of Aug.
Mod.	Goe's Golden Drop —Large and handsome; light yellow; firm, rich, sweet; one of the best late plums.	Last of Sept.
Vig.	De SOTO —Fruit bright red; flesh yellow, firm and sweet. One of the very hardiest varieties and a regular and abundant bearer.	Aug.
Free.	Fellenberg —(Italian Prune)—A fine late plum; oval, purple; flesh juicy and delicious; parts from the stone; fine for drying. Tree very productive.	Sept.
Vig.	General Hand —Very large, oval; golden yellow, juicy, sweet and good.	First of Sept.
Vig.	German Prune —A large, long, oval variety, much esteemed for drying; color dark purple; of very agreeable flavor.	Sept.
Vig.	Geull —Fruit very large, deep bluish purple, covered with thick bloom; flesh yellowish green, coarse, sweet and pleasant; great bearer and very early; tree a hardy and rapid grower. This new variety is regarded as very valuable for market by growers along the Hudson River.	First to Middle of Sept.
Vig.	Imperial Gage (Flushing Gage, Prince's Imperial Gage)—Fruit large, oval, skin pale green, flesh juicy, sweet, rich and excellent. Tree very vigorous and productive.	Middle of Aug.
Slow.	Jefferson —Large; yellow, reddened in the sun; juicy, rich and delicious. One of the best.	Last of Aug.
Vig.	KELSEY'S JAPAN —Largest size, heart shaped; rich yellow, nearly overspread with bright red, with a fine bloom; excellent quality, rich, melting and juicy. An early and very heavy bearer.	Sept.
Vig.	Kingston —A fine, handsome plum, fruit very large and showy, usually borne in clusters; of good quality, firm flesh and rich flavor. Very fine for preserving.	Last of Aug.

HABIT OF GROWTH	NAME AND DESCRIPTION.	SEASON
Vig.	Lawrence's Favorite —Large; yellowish green; remarkably juicy and melting. One of the best; productive.	Middle of Aug.
Vig.	Lombard (Bleecker's Scarlet)—Medium, roundish oval; violet red; juicy, pleasant and good; adheres to the stone; productive. A valuable market variety; one of the most hardy and popular.	First of Sept.
Vig.	MARIANNA —A new variety, very similar to Wild Goose in fruit, but about two weeks earlier. It is hardy, having stood 32 degrees below zero without injury, is an early and abundant bearer, trees usually bearing when two years old.	Middle to last of July.
Vig.	McLaughlin —Large, yellow, firm, juicy, luscious; productive.	Last of Aug.
Vig.	MOGUL —A highly esteemed English variety. Fruit large; dark purple; flesh pale yellow, firm, juicy, sweet, sprightly. Tree very hardy and productive; a valuable market variety, being one of the latest.	Last of Sept.
Vig.	Monroe —Medium, excellent; vigorous grower and abundant bearer.	Sept.
Vig.	Moore's Arctic —New; fruit grows in large clusters; large, dark purple; flavor very fine both for preserving and dessert. A long keeper.	Sept.
Vig.	Niagara —New. Very large; reddish purple, entirely covered with gray bloom; flesh deep greenish yellow.	Middle of Aug.
Free.	Peach —Very large and handsome; dull red; good, very productive.	Last of Aug.
Vig.	Pond Seedling —A magnificent English Plum; light red, changing to violet; flesh rather coarse; abundant bearer. One of the most attractive in cultivation.	Sept.
Vig.	PRUNUS SIMONI (Apricot Plum)—Of Chinese origin. Tree resembles a peach in all points except the color and veining of the leaves. The fruit is described as resembling in appearance a flattish, smooth brick-red tomato. Flesh a rich yellow, firm, with a peculiar aromatic flavor not found in native plums. Adapted to a hot, dry climate; tree somewhat harder than the Ben Davis apple.	Sept.
Vig.	Purple Egg (Hudson River Purple Egg)—Highly esteemed by growers along the Hudson River; described as one of the richest and finest flavored Plums we have; stone free; good size; resembles the German Prune—a little larger—with a nice bloom; good bearer and brings a good price in market; tree bears young.	Sept.
Vig.	Quackenboss —Large, oblong, oval; deep purple; a little coarse, sprightly, juicy, sweet and excellent. Adheres slightly to the stone; productive. Valuable for market.	Oct.
Free.	Red Egg (Red Magnum Bonum)—Large; red; firm flesh; sub-acid.	First of Sept.
Vig.	Reine Claude de Bayay —Large, nearly round; pale yellow, marked with red; juicy, melting and excellent; good bearer.	First of Sept.
Free.	SHIPPER'S PRIDE —Fruit large; color dark purple, handsome and showy; flesh firm, of excellent quality; very productive and promises to be a valuable market variety.	Sept.
Free.	Shropshire Damson —A plum of fine quality, as free from the attacks of the curculio as the Common Damson, and of same color. The flesh is amber colored, juicy and sprightly. Very productive, and a valuable market variety.	Last of Sept.
Free.	Smith's Orleans —Large size, reddish purple; flesh firm and juicy, with a rich, fine flavor; productive.	Last of Aug.
Dwarf.	STRAWBERRY —Tree a perfect dwarf and one of the hardiest, being of Western origin. Fruit a bright red, nearly as large as Wild Goose, and similar in quality, but ripening full three weeks earlier; it is the earliest ripening plum grown, bears heavily and early, usually the first season after being transplanted. It is especially suitable for the dooryard, as its dwarf habit of growth, its beautiful blossoms in the spring, and its large crops of bright red fruit in the summer, all combine to make it the most ornamental of all the fruit trees.	First to Middle of July.

HABIT OF GROWTH	NAME AND DESCRIPTION.	SEASON
Free.	Washington —Very large; clear yellow, marked with red; flesh firm, very juicy and excellent; very popular; productive.	Last of Aug.
Vig.	Weaver —Fruit large; purple, with a blue bloom; very prolific; a constant and regular bearer and of good quality. The tree is very hardy, not being injured in the severest winters, and will thrive even to the northern limits of the United States.	Aug
Vig.	Wild Goose —Fruit medium; color a beautiful bright red; flesh juicy and sweet.	First of Aug.
Vig.	Yellow Egg (Yellow Magnum Bonum)—Very large, egg-shaped; excellent for cooking; good and productive.	Last of Aug.

CHERRIES.

The Cherry thrives best on a dry, sandy or gravelly soil, and there attains its highest perfection, but will do well in almost any situation except a wet one.

We divide them into two classes: (1) Heart's and Bigarreus; (2) Dukes and Morellos. The former are strong and vigorous growers, making large, open, spreading heads, and are best suited for the purpose of shade; their fruit is large, heart shaped, meaty and sweet. The Dukes and Morellos do not attain so large size, but are more hardy and less liable to injury from bursting the bark; their fruit is usually sour.

For dry soils we rate the cherry, and particularly the Morello class, one of the most profitable fruits grown. The Hearts and Bigarreus are profitable for home market, but for shipping, the Dukes and Morellos carry the best and yield the largest returns. Ordinary well grown trees produce from five bushels per tree upwards, and the fruit brings one year with another two to three dollars per bushel.

HEART AND BIGARREAU CHERRIES.

HABIT OF GROWTH	NAME AND DESCRIPTION.	SEASON
Free.	Black Eagle —Large, black; very tender, juicy, rich and high flavored; productive.	First to middle of July.
Vig.	Black Tartarian —very large, bright purplish black; half tender, juicy, very rich, excellent flavor; productive.	Last of June.
Vig.	Goe's Transparent —Medium size, pale amber, red in the sun; tender, juicy, rich, handsome; one of the best; productive.	Last of June.
Vig.	Downer's Late Red —Large, light red; tender, juicy and delicious; productive.	Middle of July.
Free.	Early Purple Guigne (Early Purple)—The earliest fine variety; medium size, heart-shaped; tender, juicy and sweet; very hardy and productive.	First to middle of June
Vig.	Elkhorn (Tradescant's Black Heart)—A fine, large black cherry, of good quality; productive. One of the most valuable for market.	Middle of July
Vig.	Elton —Large and fine flavor; pale yellow, light red next the sun.	Last of June.
Vig.	Florence —Resembles Napoleon Bigarreau, but ripens a little later and hangs a long time on the tree. Color yellow with a reddish cheek; flesh firm, rich, sweet, fine flavor. Hardy and a good bearer.	Middle of July
Vig.	Gov. Wood —One of the best cherries; very large; light red; juicy, rich and delicious. Tree healthy and a great bearer. Hangs well on the tree.	Last of June.
Free.	Knight's Early Black —Large, black, tender, juicy, rich and excellent; productive.	Middle to last of June

HABIT OF GROWTH	NAME AND DESCRIPTION.	SEASON
Vig.	Napoleon Bigarreau —Very large, pale yellow or red; very firm, juicy and sweet; very productive; one of the best.	First of July.
Vig.	Rockport Bigarreau —Large; pale amber with clear red; a very excellent and handsome cherry; good bearer.	First of July.
Vig.	Schmidt's Bigarreau —Remarkably hardy and productive. Fruit grown in clusters and of the largest size; a deep black color; flesh dark, tender, juicy, with a fine rich flavor.	July.
Vig.	White Caroon —Fruit of the largest size; flavor sub-acid. The beautiful appearance and rich flavor of this cherry make it the choicest of all for canning.	Middle to last of July.
Vig.	Windsor —Fruit large; liver colored, resembling the Elkhorn, ripening a few days after that variety; flesh remarkably firm, of fine quality. Tree hardy and prolific.	Middle of July.
Free.	Yellow Spanish —Large, pale yellow, with red cheek; firm, juicy and excellent; one of the best light colored cherries; productive.	Last of June.
DUKE AND MORELLO CHERRIES.		
Vig.	Belle de Choisy —Medium, amber, mottled with red; tender, juicy, sweet and rich.	Last of June.
Free.	Belle Magnifique —Fruit large, roundish; skin bright red; flesh tender, juicy, sprightly, sub-acid; one of the finest of this class of cherries. Tree hardy and very productive.	Last of July.
Free.	Early Richmond (Kentish, Virginia May)—Medium size; dark red; melting, juicy, sprightly, acid flavor. This is one of the most valuable and popular of the acid cherries, and is unsurpassed for cooking purposes, and is exceedingly productive.	June.
Mod.	Empress Eugenie —Fruit large, dark red, very rich, tender and sub-acid. A superior variety.	First of July.
Mod.	English Morello —Medium to large; blackish red; rich, acid, juicy and good; very productive.	Aug.
Free.	Large Montmorency —A large, red, acid cherry, larger than Early Richmond, and fully ten days later.	Last of June.
Mod.	Late Duke —Large, light red; late and fine.	Last of July.
Free.	Leib —A new Morello, one week later than Early Richmond.	Last of June.
Free.	Louis Phillippe —Very productive; fruit large, roundish, regular; color rich dark, almost purplish black red; flesh red, tender, sprightly; mild, acid; good to best.	Middle of July.
Free.	May Duke —Large, dark red, juicy and rich; an old, excellent variety; productive.	Middle of June.
Free.	Olivet —A new variety of French origin. Large, globular, very shining, deep red sort; flesh red, tender and rich; vigorous; very sweet, sub-acid flavor.	Middle to last of June.
Free.	Ostheim —A Russian cherry of recent introduction; very hardy; color dark red; flesh very dark, juicy, with a pleasant sub-acid flavor. Its hardiness, productiveness and quality render it a valuable acquisition.	Middle of July.
Vig.	Reine Hortense —Very fine; large, bright red; juicy, delicious and productive.	Middle of July.

PEACHES.

The Peach tree requires a well drained, moderately rich soil—warm, sandy loam is probably the best.

In order to preserve the continued healthy growth of the tree and the fine quality of the fruit, the Peach should have the shoots and branches cut back to one-half the preceding season's growth every year, so as to preserve a round, vigorous head; this should be done the last of February, or as early in the spring as practicable. The land should not be seeded to grass, but kept in constant cultivation.

The following have been selected after an examination of more than one hundred different sorts in bearing, the best only being chosen. They furnish a succession for about two months, commencing the early part of August.

Alexander—Of good size, handsome and regular in form with deep maroon shade, covered with the richest tint of crimson; rich and good in quality with a vinous flavor; free-stone. Middle to last of July.

Amsden—A new early peach, of medium size; fine color, juicy and melting. Middle to last of July.

Barnard's Early—Medium to large; yellow, cheek purplish red; flesh yellow, red at the stone, juicy, sweet and rich. One of the very best yellow-fleshed peaches. First to middle of September.

Coolidge's Favorite—Large white, with crimson cheek; flesh pale, very melting and juicy, with a rich, sweet and high flavor; beautiful and excellent. Productive. Middle to last of August.

Crawford's Early—This very beautiful and best of yellow peaches is highly esteemed for market purposes. Fruit very large, oblong; skin yellow, with fine red cheek; flesh yellow, juicy, sweet and excellent. Wonderfully productive and hardy. Last of August.

Crawford's Late—Fruit of the largest size; skin yellow, or greenish yellow, with dull red cheek; flesh yellow; productive. One of the finest late sorts. Last of Sept.

Downing—Fruit medium; greenish white, nearly covered and mottled with red; flesh white, juicy, melting and sweet. Middle to last of July.

Early Canada—A hardy, Canadian variety; color bright red; juicy, rich and melting. Middle to last of July.

Early Rivers—Large, light straw color, with delicate pink cheek; flesh juicy and melting, with very rich flavor. Ripens about a week earlier than Hale's. Last of Aug.

Early York—Medium size; greenish white, covered in the sun with dull red; flesh greenish white, very tender. Middle of Aug.

Foster—Large; deep orange red, becoming very dark red on the sunny side; flesh yellow, very rich and juicy, with sub-acid flavor. Very handsome. Last of Aug.

Garfield, or Brigdon—Flesh yellow, very rich and juicy; color deep orange red, becoming dark red on the exposed side; very attractive; foliage large, green, glossy and peculiar. Middle of Sept.

George IV.—Large; white, with red cheek; melting, juicy and delicious. Moderate bearer. Last of Aug.

Hale's Early—Fruit medium size, skin clear, smooth, white, delicately marbled with bright and dark red on the sunny side; flesh very melting, juicy, and high flavored. Middle of Aug.

Hill's Chili—Medium size, dull yellow; tree very hardy, a good bearer; highly esteemed as a market fruit everywhere. Last of Sept.

Honest John—Medium to large; yellow; flesh yellow and of good quality. Tree vigorous and productive. First of Sept.

Jacques Raroripe—Very large; deep yellow; has a high reputation. Last of Aug.

Large Early York—Large, white, with a red cheek; fine grained, very juicy, rich and delicious; vigorous and productive; one of the best. Last of Aug.

- ✓ **Lord Palmerston**—Very large; skin creamy white, with a pink cheek; flesh firm, yet melting; very juicy and rich. Middle to last of Sept.
- ✓ **Morris White**—Medium; straw color, tinged with red; juicy and delicious; productive. Middle of Sept.
- ✓ **Mountain Rose**—Large; red; flesh white, juicy, rich and excellent; one of the best early peaches. Should be in every collection. First of Aug.
- ✓ **Old Mixon Cling**—Large; pale yellow, with red cheek; juicy, rich and high flavored; one of the best clingstone peaches. Last of Sept.
- ✓ **Old Mixon Free**—Large, pale yellow, with deep red cheek; tender, rich and good; one of the best. First to middle of Sept.
- ✓ **Salsway**—Fruit large, roundish; deep yellow, with a rich marbled brownish red cheek; flesh yellow, firm, juicy, rich and sugary. A new English variety, a good keeper and promising highly as a late showy market sort. First of Oct.
- ✓ **Schumaker**—New; earlier than Alexander. Medium to large; bright yellow, splashed with crimson; juicy, melting and rich; parts freely from the stone when fully ripe. Middle of July.
- ✓ **Steadley**—Large, round, of a greenish white color; flesh white to the stone, and of a delicious flavor; freestone, very hardy. First of Oct.
- ✓ **Stevens' Rareripe**—Very productive and of high color; beautiful. Commences to ripen immediately after Late Crawford, and continues three weeks. Last of Sept. and first of Oct.
- ✓ **Stump the World**—Very large, roundish; skin white, with a bright red cheek; flesh white, juicy and good. Last of Sept.
- ✓ **Susquehanna**—One of the handsomest peaches; large, yellow and red; melting, rich and good; poor bearer. Last of Sept.
- ✓ **Wager**—Very large; yellow, more or less colored on the sunny side; juicy, and of fine flavor. First of Sept.
- ✓ **Ward's Late Free**—Medium to large; yellowish white, with a red cheek in the sun; flesh nearly white, juicy and good; valuable for late preserving. Tree vigorous. First of Oct.
- ✓ **Waterloo**—The fruit is medium to large size; skin whitish green in the shade, marbled red, deepening into dark purple crimson in the sun; flesh greenish white, with an abundance of sweet vinous juice. It is a remarkable keeper. Middle of July.
- ✓ **Wheatland**—Ripens between Early and Late Crawford, and larger than either of them. Hardy and very productive. First to middle of Sept.
- ✓ **Wilder**—Tree a very vigorous grower; hardy and productive. Fruit medium to large; round; flesh very juicy and rich. Last of July.
- ✓ **Willett**—Flesh juicy and rich; color bright yellow, mostly covered with dark red. Middle of Sept.
- ✓ **Yellow Rareripe**—Large; deep yellow, dotted with red; melting and juicy, with a rich flavor. Last of Aug.

NECTARINES.

A most delicious, smooth-skinned fruit, which thrives wherever peaches will grow, but it is liable to be stung by the curculio, and requires the same treatment as plums. Trees good, vigorous growers.

- ✓ **Boston**—Large, deep yellow, with a bright blush and mottlings of red; sweet, with a peculiar, pleasant flavor; freestone; the largest and most beautiful variety known; hardy and productive. Sept.
- ✓ **Early Violet**—Medium size, yellowish green, nearly covered with dark purplish red; juicy, rich and high flavored. Last of Aug.
- ✓ **Red Roman**—Large size, greenish yellow, with a dark, dull red cheek; flesh yellowish, fine and rich; productive. First of Sept.

APRICOTS.

The Apricot is one of the most beautiful and delicious fruits we possess, and its value is greatly enhanced by the season of its ripening, between cherries and peaches. In a selection of choice garden fruits it is quite indispensable. It succeeds admirably trained in espalier form, which will be found advantageous in small gardens, as it may occupy a house wall, fence or trellis, leaving the ground open for other trees. In cold sections, too, where the tree gets winter killed, or the blossoms injured by the late spring frosts, these espalier trees can easily be protected by mat or board screens. To protect against the curculio, see directions for the plum.

Breda—Small, dull orange, marked with red; juicy, rich and vinous; productive and hardy. First of Aug.

Early Golden (Dubois)—Small, pale orange; juicy and sweet; hardy and productive. First of July.

Moorpark—One of the largest; orange, with a red cheek; firm, juicy, with a rich flavor; very productive. Aug.

Peach—Very large; orange, with a dark cheek; juicy and high flavored. Similar to Moorpark. Aug.

Russian Apricot (*Prunus Siberica*)—Described as the hardiest of all the Apricots, having stood 30° below zero without injury, while others were frozen to the ground.

QUINCES.

The Quince is attracting a great deal of attention as a market fruit. Scarcely any fruit will pay better in the orchard. The tree is hardy and compact in growth, requires but little space, is productive, gives regular crops, and comes early into bearing. The fruit is much sought after for canning for winter use. When put up in the proportion of about one quart of quinces to four of other fruit, it imparts to them a most delicious flavor.

It flourishes in any good garden soil, which should be kept mellow and well enriched. Prune off all the dead and surplus branches, and thin out the fruit if bearing too freely.

Angers—Somewhat later than the Orange, and fruit rather more acid, but cooks well; an abundant bearer. Most hardy and longest keeper. Oct.

Apple or Orange—Large, roundish; bright golden yellow; cooks tender and is of very excellent flavor. Valuable for preserves or flavoring; very productive; the most popular and extensively cultivated variety. Oct.

Champion—A new variety originated in Connecticut. The tree is a prolific and constant bearer; fruit averaging larger than the Orange, more oval in shape, quality equally fine, and a longer keeper. Oct. and Nov.

Meeche's Prolific—Tree a rank grower, and an early and abundant bearer of large beautiful fruit of excellent flavor; of great excellence as a cooking variety. Oct. and Nov.

Rea's Mammoth—A seedling of the Orange quince; one-third larger, of the same form and color; fair, handsome, equally as good, and productive. Oct.

GRAPES.

The vine comes quickly into bearing, yielding fruit usually the second year after planting; requires but little space, and when properly trained, is an ornament to the yard, garden, or vineyard.

The soil for the grape should be dry; when not naturally so should be thoroughly drained. It should be deeply worked and well manured, always bearing in mind that it is an essential point to secure a warm, sunny exposure.

The best grape vine trellis is probably the wire trellis, with four wires eighteen inches apart. When, however, it is not convenient to make a wire or other trellis, very good results are had with the old vineyard system of training to stakes. The vines are planted six feet apart, in a place exposed to the sun and protected from cold winds, if convenient, and are trained to an upright stake. This method is as simple as the cultivation of Indian corn. Often a large and uncomely rock may be converted to usefulness and beauty by planting a grape vine on its sunny side, and making use of the rock as a trellis.

To secure the best results, annual and careful pruning is essential. The following is regarded as the best method: commencing with a good strong vine, such as we furnish, permit it to grow the first season without pruning. In November or December following, cut back the growth, allowing but three or four buds to remain. The following Spring, allow but two of the strongest buds to throw out shoots. These, in the Fall, will be from seven to ten feet long, and should be cut back to within four or five feet of the root. The next Spring the vine should be fastened to the lower part of the trellis. When growth commences, pinch the buds so that the shoots will be from ten to twelve inches apart. As these grow, train them perpendicularly to the second, third and fourth bars of the trellis, and in the fall the vine with its fruit will present the appearance shown in cut No. 1. No fruit should be allowed to set above the second bar of the trellis.

During the season when the shoots have reached the upper part of the trellis, they may be pinched to prevent further growth. After the fruit is gathered, and the vine has shed its foliage, the canes should then be cut back to two buds, as shown in cut No. 2. The following spring allow but one bud to throw out a shoot, and treat as in the previous year. This system of pruning should be followed each year. After the vine has undergone the Fall pruning it may be laid upon the ground and covered with boughs, to protect it through the Winter. Grape vines should be top-dressed in the Spring.



No. 1.



No. 2.

may be spread out to dry for two days and then laid in market baskets, and suspended in a cool, dry cellar.

✓ **Amber Queen**—Is very early, hardy, and a strong grower; amber color, but growing darker and richer to the fifteenth of September, when, by its heavy bloom, it becomes a purple grape. Aug. and Sept.

Brighton—A cross between the Concord and Diana Hamburg. It gives the best of satisfaction. Bunches large, berries of medium size, dark red; flesh sweet, tender, and of the highest quality. Ripens one week earlier than the Delaware. First of Sept.

Catawba—Bunches large and loose; berries large, of a coppery red color, becoming purplish when well ripened; later than Isabella; requires the most favorable soils and situations, good culture and warm seasons, to mature perfectly in Western New York. Last of Sept.

Champion (Talman)—This variety is valued chiefly for its earliness, being some days earlier than the Hartford, and nearly or quite equal to the latter in flavor; black. Aug.

Concord—A popular variety where the choice kinds fail to ripen; universally healthy, vigorous and productive; flesh somewhat buttery, moderately juicy and sweet. Bunch large, nearly black with bloom; early. Sept.

Delaware—Still holds its own as one of the finest grapes. Bunches small, compact-shouldered; berries rather small, round; skin thin, light red; flesh very juicy, without any hard pulp, with an exceedingly sweet, spicy and delicious flavor. Vines moderately vigorous, very hardy and productive. Sept.

Diana—Bunches a little above medium size, compact; berries large, light red, very juicy and sweet, with distinct, spicy, refreshing flavor; vine a vigorous grower, and bears well. Middle of Sept.

Duchess—Bunch medium to large, often eight inches long, shouldered, compact; berries medium, round, greenish white; skin thin; flesh tender, without pulp, rich and delicious. Ripens with the Delaware. Sept.

Empire State—The Empire State is a seedling of the Hartford Prolific, fertilized with the Clinton. A good grower and fruiter in every respect. Bunches large, from six to ten inches long, shouldered; berry medium to large; roundish oval; color white with very light tinge of yellow, covered with a thick white bloom; flesh tender, juicy, rich, sweet and sprightly, with a slight trace of native aroma; continuing a long time in use; vine very hardy. Its great productiveness, beautiful color, good quality, extreme hardiness and vigor and healthfulness of vine and foliage, size and compactness of cluster and good shipping qualities make it the best White Grape, all things considered, yet produced. Early in Sept.

Hartford Prolific—Bunches rather large; berries large, globular; color almost black, covered with a beautiful bloom; flesh sweet and juicy. Ripens four or five days before Concord; valuable for its hardiness, abundant bearing and early maturity. Aug.

Jefferson—Vine, very vigorous, very hardy and productive; leaves large, thick, downy; bunch very large, often double shouldered, very compact; berries large, roundish, oval, light red, with a thin lilac bloom, flesh meaty or solid, tender, juicy, sweet, slightly vinous, spicy; best for market. Sept.

Jessica—A promising Canadian variety, bunch and berry of medium or small size; color yellowish green, mellowing to a clear amber; flesh with very little pulp; sweet, sprightly, aromatic. Vine hardy and productive. The wine from this grape is very fine, clear and sparkling, similar to the best champagne. Sept.

Lady—A seedling of the Concord; of medium size, white and very good flavor; very early. First of Sept.

Lady Washington—Fruit yellow, tinged with pink; bunches very large. Vine strong, very hardy. Sept.

Martha—A seedling of the Concord, which it resembles in growth and hardiness. Bunch of good size, and berry large, of pale green or light color; buttery, sweet, juicy, sprightly. Ripens with the Concord. Sept.

Moore's Early—A new hardy grape, a seedling of Concord, combining the vigor, health and productiveness of Concord, and ten days earlier than Hartford. In quality, hardly to be distinguished from Concord. Bunch large, berries very large, black. Aug.

Niagara—Bunch medium to large, compact, occasionally shouldered; berry large, roundish, uniform, of a pale, greenish color; flesh slightly pulpy, tender, sweet. Vine remarkably vigorous, healthy and productive. Sept.

Pocklington—Is a seedling from Concord; fruit a light golden yellow, clear, juicy and sweet to the center, with little or no pulp; bunches very large, sometimes shouldered; berries round, very large and thickly set. First of Sept.

- ✓ **Poughkeepsie Red**—Larger than Delaware, and fine quality. Vine resembles Delaware in wood and foliage; a much better grower and succeeds where Delaware will not. Sept.
- ✓ **Ulster Prolific**—A new variety resembling Catawba in size, color and shape of cluster. Of good quality, ripening early; vine hardy and very productive. Sept.
- ✓ **Vergennes**—Downy and free from mildew; very productive; clusters large, berries large, holding firmly to the stems; color light amber; flavor rich and delicious; flesh meaty and tender. Ripens with Concord, and is an excellent late keeper. Sept.
- ✓ **Worden**—Bunches large, handsome, double shouldered; berries large, sweet, lively, with very little of the foxy or native flavor. Being ten days earlier than Concord, it ripens well in cold localities; vine very thrifty and vigorous, perfectly hardy and a good bearer. It is coming rapidly into repute as one of the leading sorts for general cultivation, ranking in this respect with Concord, to which it is decidedly superior in quality; black. Middle of Sept.

ROGERS' HYBRIDS.

- ✓ **Agawam** (No. 15)—Large, round, early and of great vigor of growth. Rich, peculiar aromatic flavor. Considered by Mr. Rogers as the best of his strictly red Hybrids. Sept.
- ✓ **Barry** (No. 43)—Bunch large, but rather short; berries large, roundish; delicate, sweet and tender. Vine vigorous and productive. One of the largest and finest of the Rogers' Hybrids; black. Sept.
- ✓ **Gæthe** (No. 1)—A fine light colored variety, tinged and nearly covered with red. Bunch and berry large. Ripens with Catawba. Last of Sept.
- ✓ **Lindley** (No. 9)—Resembles No. 3 in appearance, but distinct in flavor. First of Sept.
- ✓ **Massasoit** (No. 3)—Large; resembles Diana in quality; a little native flavor, tender, sweet and good. The earliest of these Hybrids, and by some highly esteemed; color, rich claret red. Last of Aug.
- ✓ **Merrimack** (No. 19)—Very large and earlier than the Diana; very strongly resembles No. 4. Berries and bunches large, compact; a very strong grower; black. Sept.
- ✓ **Salem** (No. 53)—Bunch large and compact; berry large, of a light chestnut or Catawba color, thick skinned, perfectly free from hard pulp; very sweet and sprightly, with a most exquisite aromatic flavor; as early as the Delaware; keeps well. First of Sept.
- ✓ **Wildor** (No. 4)—Large, bunches generally shouldered; berry round and large; flesh buttery, with a somewhat fibrous center; sweet, rather sprightly; black. Middle of Sept.

SMALL FRUITS.

The small fruits, such as Strawberries, Raspberries, Blackberries, Gooseberries, Currants, etc., ripening from the first of June till fall, are everywhere capable of successful cultivation, and yield large returns at comparatively small expense. They should have a place in every garden. Since the introduction of self-sealing jars and cans, they can be had throughout the year almost as fresh as when gathered.

STRAWBERRIES.

First of the small fruits in June comes the strawberry. The profits which may result from its cultivation, when properly conducted, are enough to satisfy the highest expectations.

Plant in the Spring, (or in the South, either Fall or Spring), on good ground, deeply

worked and well manured. Vegetable manure (muck, rotted turf, wood soil, ashes, etc.) is the best. Bone dust is excellent. Set in 3 feet rows, 15 inches apart in row for field culture, and 15 inches each way for garden, leaving a pathway at every third row. Keep in hills with runners cut, unless troubled with the white grub. Cultivate clean, mulch late in the Fall, uncover crown early in Spring, remove mulch after fruiting, and spade in light dressing of manure. Some varieties of strawberries like the Crescent, have an imperfect or "pistillate" flower, and unless planted by the side of a variety having a perfect flower they will be entirely barren of fruit.

Bidwell—One of the very best, abundantly productive, full average size, excellent flavor and one of the very earliest. Flowers perfect.

Charles Downing—Large, conical, crimson; flesh firm; of fine flavor and good quality; plant healthy, vigorous and productive. Flowers perfect.

Crescent Seedling—Medium, conical, bright scarlet, very uniform in size. A beautiful berry, commencing to ripen with Wilson's Albany, and continuing in fruit longer. Has been shipped 200 miles without changing color. The plants are wonderful in growth, taking entire possession of the ground to the exclusion of weeds and grass. It appears alike at home on all soils. This is the leading pistillate variety and seems to do best planted with the Wilson. Flowers pistillate.

Cumberland Triumph—A magnificent variety; berries immense; fine perfect form, and of fine flavor. Plant very vigorous and productive. Flowers perfect.

James Vick—An exceedingly vigorous grower, foliage healthy and of a peculiar dark or blue-green color, very distinct perfect blossom. It is very productive and a superior shipping berry; fruit medium size and very uniform. Flowers perfect.

Jewell—A new variety of excellent quality; good size, form and color; flesh firm, rich and juicy; a good bearer. Flowers perfect.

Manchester—New. Size large, color scarlet, flesh pink, firm but melting, with a rich sub-acid juice, and a decided aromatic flavor. Plant robust and very productive; quality very good to best. The plant is seemingly well adapted to very light soils. Flowers perfect.

Parry—A rank, vigorous grower, clean foliage and very productive. Berries large, obtuse, conical; bright glossy scarlet; firm and of best quality, ripening all over at once. Flowers perfect.

Sharpless—This is one of the very best new varieties. Large in size, delicious flavor; good bearer, bright color. Has been thoroughly tested. Flowers perfect.

Wilson's Albany—Large, conical, dark red, firm, hardy; prolific, rather acid. Succeeds everywhere. Flowers perfect.

RASPBERRIES.

The fruit comes just after strawberries, and when properly cultivated is quite profitable.

Plant on strong soil, manure freely, cultivate well or mulch heavily. For field, rows seven feet apart, four feet in row. Pinch off canes when three feet high, and prune off laterals the following Spring, within twelve or eighteen inches of the cane. Cut out old wood each year immediately after the bearing season is over. Cover tender varieties in Winter by bending down and throwing on earth or coarse litter. In the Spring they should be raised and tied to a stake.

RED RASPBERRIES.

Brandywine—A large, scarlet berry, firm and beautiful; bears transportation well, but not quite equal to some others in quality.

Cuthbert—A variety of the greatest excellence. One of the few kinds that may be pronounced perfectly hardy. The canes are tall and vigorous, and enormously productive. Berries very large, conical; rich crimson; very handsome, and so firm that they

can be shipped hundreds of miles by rail without injury. Flavor rich, luscious, best; commences to ripen moderately early, and holds on until all others are gone.

✓ **Hansell**—One of the very earliest and most desirable of Red Raspberries; color bright scarlet; quality excellent; very productive. Its great earliness causes it to bring the highest price in market.

✓ **Herstine**—Plant a good grower, bears early and abundantly, hardy and very productive on all soils. Suckers moderately. Fruit large, firm; bright crimson, with small grains. Flavor sub-acid and very good.

✓ **Highland Hardy**—Plants very hardy and thrifty; unusually productive; succeeds on almost any soil, and ripens the fruit very early; berry good size; bright red, and sufficiently firm for shipping. Valuable for market.

✓ **Marlboro**—A strong grower, with heavy canes and laterals; hardy. Fruit very large; bright crimson, holding its color well. An exceedingly early variety, and a vigorous heavy bearer, of excellent quality. A truly reliable acquisition.

✓ **Philadelphia**—Dark red, very productive, of medium quality.

✓ **Rancocas**—A new variety, among the early varieties what Cuthbert is among the late. Very vigorous. Ripens its fruit in a short time, making it a valuable market sort.

✓ **Shaffer's Colossal**—Colossal both in bush and berry. Carries to market well; excellent to dry and unsurpassed for canning. Berry dark crimson in color and excellent in quality; a very valuable variety. Does not sucker, but roots from tips like Black Caps.

✓ **Turner**—A beautiful red berry of fine size and excellent quality; said to be the hardest and most productive variety known.

YELLOW RASPBERRIES.

✓ **Brinckle's Orange**—Large, orange yellow; high flavored, tender.

✓ **Golden Caroline** (Caroline Yellow)—A yellow cap variety, medium to large; a rich orange color; moderately firm, very hardy and prolific; represented a valuable garden variety.

BLACK CAPS.

✓ **Davison's Thornless**—Scarcely a thorn on it. This, alone, is sufficient to make it very desirable indeed, but we may add, also, that it has proved to be a week earlier than the "Doolittle," fully equal in size of berry and as hardy. Very sweet and finely flavored.

✓ **Doolittle's Black Cap** (Doolittle's Imported)—Much superior to the old American variety; of good size, with sweet, rich flavor; bears enormous crops and is an excellent market berry.

✓ **Gregg**—One of the most valuable varieties of the black cap family; fruit larger than the Mammoth Cluster, but not quite so good in quality; ripens some days later; hardy, a vigorous grower and great yielder.

✓ **Mammoth Cluster** (McCormick)—A large and very productive variety of black cap. Quality good; ripens just after Souhegan and before the Gregg.

✓ **Ohio**—The greatest producer among Black Caps, and for canning or evaporating the most profitable of all sorts. Berry not quite as large as Gregg, but finer quality and the plants more hardy and will bear more successive crops.

✓ **Souhegan**—Large; black, without bloom and of medium quality. Very hardy and a great bearer; a little earlier than Mammoth Cluster.

BLACKBERRIES.

Plant on good land, MODERATELY manured. Rows seven feet apart, three feet in the rows for field; prune as with Raspberries. Form a hedge or tie to wire. Cultivate SHALLOW.

✓ **Agawam**—Ripens earlier than other kinds, and has a flavor similar to and equal to the wild berry. Perfectly hardy.

Early Harvest—A new variety of great promise, being exceedingly early in time of ripening and always reliable. The canes are strong and upright in growth, branching stout and vigorously. Hardier than Kittatinny or Lawton; an enormous bearer. Berries sweet and of the highest quality, though not as large as some varieties.

Kittatinny—Commences to ripen after the Wilson's Early, and continues longer in bearing; is ripe as soon as black, and much earlier, sweeter and better in all respects than the Lawton, which it resembles in plant and fruit.

Lawton—Fruit very large and black, and of excellent quality; an abundant bearer.

Snyder—Extremely hardy, enormously productive, medium size; no hard, sour core; half as many thorns as Lawton or Kittatinny, and they are nearly straight and short; exceedingly productive.

Taylor—One of the largest blackberries grown. Fruit of the best quality, melting and without core; very productive, and as hardy as the Snyder.

Wachusett Thornless—Fruit of medium size, oblong, oval, moderately firm; sweet and good, and less acid than any blackberry we have seen. It is a good keeper; ships well. It is also very hardy, and comparatively free from thorns.

Wilson's Early—Of good size, very early; beautiful dark color; of sweet, excellent flavor and very productive. Ripens the whole crop nearly together.

Wilson, Jr.—A week earlier than Old Wilson, from which it is a seedling. Of largest size, and enormously productive; promises to be a very valuable sort. In severe climates should have winter protection.

DEWBERRIES OR RUNNING BLACKBERRIES.

Lucretia—The plants are perfectly hardy and healthy, and remarkably productive. The flowers are very large and showy. The fruit, which ripens with the Mammoth Cluster Raspberry, is very large, soft, sweet and luscious throughout, without any hard center or core. As the Dewberry roots only from the tips, and does not sprout like blackberries, this will be much more desirable for garden culture, and the trailing habit of the plant will render winter protection easily accomplished in cold climates, where that precaution may be necessary. The Lucretia has proved to be the best variety of Dewberries, and is recognized as a very valuable acquisition to the list of small fruit; there are, however, many other varieties, most of which should be avoided, many being entirely worthless.

GOOSEBERRIES.

This fruit requires the same cultivation as the currant. The surest method to prevent mildew is to plant thickly in the rows, and mulch deeply six or more inches with straw, tan bark, coal ashes, etc. Plantations thus treated have borne large crops for twenty years. The mulch retains moisture in the driest weather; the few weeds that push up are easily pulled, and the fruit is large and more evenly ripened. In mulching, be sure the ground is UNDER-DRAINED, or it is worse than useless. Good cultivation is better than HALF mulching. Put it on thick. In a dry season the extra amount of fruit will doubly pay for the material used, not to speak of the saving of labor and cleanliness of the fruit. The price is remunerative, and the demand is yearly increasing. The American varieties are not subject to mildew.

ENGLISH GOOSEBERRIES.

The number of varieties of English Gooseberries is almost innumerable. The fruit is generally large and handsome.

Crown Bob—Fruit large, oblong, hairy; flavor first class.

✓ **Industry**—An English variety ; quite as free from mildew as our American sorts ; very fine in quality ; large size. Handsome, showy red fruit ; wonderfully productive.

✓ **White Smith**—Fruit very large ; oblong ; light green ; downy ; flavor excellent ; erect branches. Succeeds better than most English varieties and bears abundantly.

AMERICAN GOOSEBERRIES.

✓ **Downing**—Fruit larger than Houghton ; roundish ; light green, with distinct veins ; skin smooth ; flesh rather soft ; juicy and very good. Vigorous and productive.

✓ **Houghton's Seedling**—A medium sized American variety, which bears abundant and regular crops, and never mildews ; fruit smooth, red ; tender and very good ; valuable.

✓ **Smith's Improved**—From Vermont. Large, oval ; light green with bloom ; flesh moderately firm ; sweet and good. Vigorous grower.

CURRENTS.

This fruit comes partly with the Raspberry, but follows it several weeks. Indeed none of the small fruits will remain so long upon the bushes without injury as the Currant. An easy method of destroying the currant worm is by the use of powdered White Hellebore (*Veratrum Album*).

Set four feet apart in rich ground ; cultivate well or mulch heavily ; prune out old wood, so that each remaining shoot will have room to grow ; if the currant worm appears dust with hellebore every three weeks. Manure freely.

✓ **Black Naples**—Very large, black ; rich, tender and excellent for jellies and wine ; very productive.

✓ **Cherry**—Very large, deep red ; rather acid ; bunches short. Plants erect, stout, vigorous and very productive.

✓ **Fay's Prolific**—Color deep red ; great bearer ; stems longer than Cherry, and berries hold their size to the end of the stem better. Quality first class ; not quite so acid as Cherry ; the best of all the red currants.

✓ **La Versailles**—Very large, red ; bunch long, of great beauty and excellent quality ; one of the finest and best, and should be in every collection. Very productive.

✓ **Lee's Prolific**—A new black English production of great value. The fruit is large and of superior quality ; the bush is a vigorous grower and enormously productive.

✓ **Prince Albert**—Large, bright red, resembling the Victoria ; valuable for its lateness ; vigorous and productive.

✓ **Red Dutch**—An old variety, excellent and well known.

✓ **Victoria**—Large, bright red, with very long bunches ; late ; a good bearer.

✓ **White Grape**—Very large, yellowish white, sweet, or very mild acid, excellent quality and valuable for the table. The finest of the white sorts. Very distinct from White Dutch, having a low, spreading habit and dark green foliage. Very productive.

MULBERRIES.

The Mulberry is a very ornamental tree in garden or lawn, with its large, green, glossy foliage ; and some newer varieties are worthy of general cultivation for their fruit alone.

✓ **Downing's Everbearing**—Tree very vigorous and productive, continuing in bearing a long time ; color blue black ; flesh juicy ; rich, sugary, with a sprightly, vinous flavor.

✓ **New American**—Fruit of the largest size, black, delicious in flavor. An attractive lawn tree, with very large leaves ; of rapid growth ; hardy.

✓ **White**—Commonly cultivated for silk. Fruit not equal to the black sorts.

✓ **Russian**—New. The timber is desirable for fuel, is the finest for cabinet work, and fence posts made from it are exceedingly durable. It is a very rapid grower, bears fruit at two or three years of age, and every year ; color of the fruit varies some, but is generally black.

ASPARAGUS.

To make a good asparagus bed, the plants may be set in the Fall or early Spring. Prepare a plant of fine loamy soil, to which has been added a liberal dressing of good manure. Select two-year, or strong one-year plants; and for a garden, set in rows 18 to 20 inches apart, with plants 10 to 12 inches in a row.

Make a small mound of the soil, over which the roots should be evenly spread, so that the crowns, when covered, shall be three inches below the surface of the ground. If planted in the Fall, the whole bed should be covered before Winter sets in, with two or three inches of coarse stable manure, which may be lightly forked in between the rows as soon as the ground is softened in the Spring.

Conover's Colossal—A new sort; very large size and of excellent quality; has superceded the old varieties.

RHUBARB, or PIE PLANT.

This deserves to be ranked among the best early plants in the garden. It affords the earliest material for pies and tarts, continues long in use, and is valuable for canning. Make the border very rich and deep.

Early Scarlet—Rather small, but early and good.

Linnaeus—Large, early, tender and fine. The very best of all.

NUTS AND MISCELLANEOUS FRUITS.

Almond, Hardshell—A fine, hardy variety, with a large, plump kernel; exceedingly ornamental when in bloom.

Almond, Softshell—This is the "Ladies' Almond" of the shops, and although preferable to the former, is not quite so hardy. Kernel sweet and rich.

Butternut—A native species. Wood light color. Tree handsome.

Chestnut, American—Our native species. Smaller than the Spanish, but sweeter.

Chestnut, Spanish—A hardy tree, producing nuts of very large size and good flavor.

Figs—Black Ischia, Brown Turkey, Celestial and White Marseilles.

Filbert, American—Smaller and with a thicker shell than the English, but of good flavor; hardy and productive.

Filbert, English—The fruit of these is so much larger and better flavored than our native species, as to give them the preference for cultivation over the latter, in localities where they will succeed.

Oranges and Lemons—Several varieties.

Walnut, Black—The well-known native species, hardy, prolific and valuable. The timber in point of durability is difficult to excel.

Walnut, English—This rich and fine flavored nut is quite hardy with us, and makes a vigorous growth. Well worthy of cultivation.

SCIONS.

Scions can be supplied of most varieties of fruits, from three to ten scions being furnished at the price of trees of the same variety, according to the scarcity of the stock. Large orders can be supplied in the Winter of the leading sorts of Apples, Pears, Plums and Cherries at greatly reduced rates.

ORNAMENTAL DEPARTMENT.

GENERAL REMARKS.

A people of intelligence like ours, who, by industry and the rapid growth of the country, are accumulating wealth, desire to use the good that a kind Providence has placed in their hands, as a means to the refinement of themselves and their families. And viewing it from our stand-point, there is no greater refining influence in nature than that imparted in the cultivation of the beautiful, in tree, shrub and flower. The hearts of the children are more closely bound to the sweet and pure ties of home, if that home is surrounded by trees and shrubbery and well-kept flower beds. Contrast such a home with the one where the bare walls and the barren yard invite the searching rays of the Summer sun to scorch and almost blind, and the bleak winds of Winter to shriek and howl about the house, with no friendly trees to raise their arms in mute protection.

We have scarcely begun to realize the commercial value of such an investment to our homes. We know a keen, sagacious business man in one of our large cities, who has operated for years past in the following manner: He buys a tract of land in the suburbs of the city, cuts it into liberal-sized building lots, drives stakes for a house, and immediately plants the ground with fruit and ornamental trees, shrubs and hedges. He then employs a good man to take care of them, and does not offer the lots for sale for two or three years, well knowing that when the purchaser goes to look at the property, he finds that when his house is built he has, instead of a naked house on a bare spot, a neat and beautiful home, with its growing trees and plants, which would have taken him years to get around him. Many of our most active business men are also men of taste, and would be glad to improve and beautify their grounds, but they are so occupied with business that they have neither the time or disposition to find out what they want, or to lay out their grounds.

After the orchard is planted, the grape vines set, and the strawberry bed prepared, the planter, if he is given to culture and refinement, and has the means and inclination, proceeds to bring about him shade and color. The deciduous tree and shrub, the evergreen, the rose and the bulb—all find their appropriate places, and in due season will yield an abundant harvest—not measured by dollars and cents indeed, but of that which ministers to higher and more enduring wants than any that the most luscious fruits can satisfy.

But so much depends on the right selection and grouping of kinds suited to a particular place and to each other, that very often he who is successful with an orchard makes a failure with a door yard. We cannot pretend within the brief limits of a Catalogue to insert an essay on Landscape Gardening, but we may present a few brief hints, gathered from experience and from standard works on the subject, which will assist the planter in making his place beautiful, and perhaps prevent serious mistakes.

We also present a list of trees and shrubs, giving their time of flowering, colors, etc., which will be found very useful in selecting and grouping the kinds desirable for different locations.

Wind-breaks of trees, more especially if they are evergreen, make the dwelling house warmer, give comfort to its inmates, diminishing to no inconsiderable extent the consumption of fuel; they make the out-building warmer for stock by night, and the yard by day.

HOW TO PLANT.

Grass and trees are always charming, and need but little care. In the laying out and planting of ground, have regard to economy of labor. Let there be as few walks as possible; cut your flower beds in the turf, and don't make the lawn a checker-board of trees and shrubs. Mass them on the boundary lines or in groups, leaving a broad expanse of green for the eye to rest on, and the mower to sweep freely over. If an unpleasant object is in sight, conceal it by planting free-growing trees; if there is a pretty view, leave an opening. While it is not well to have large trees near the house, there should be at least one by the sunny corner for Summer shade. Plant flowering shrubs and the smaller evergreens in circles or ovals, and twice as thick as they should stand when fully grown, and gradually thin out from year to year. This will supply you with finely rooted plants to set elsewhere. Plant larger trees where you wish them to stand permanently, and this will make a show at once, and in two years or more you can take out one-half, leaving the rest to fill out the space. Mow the grass frequently, and top-dress with fine manure every Fall and Winter.

At planting observe the rules given for fruit trees. Shrubs had better be cut back nearly to the ground, as stronger shoots will then be sent up. Keep all new plantings well cultivated or mulched the first year; after that the grass may be allowed to grow up to them.

Straggling growers, like the Forsythia and *Pyrus Japonica*, should be repeatedly pinched back or clipped during the growing season, to produce a close, compact form. Weigelas and Deutzias should be pruned like currants, leaving the strong, old wood to flower. Altheas, and some of the Spireas which bloom on the new shoots, may be pruned back each year to the old wood. A very beautiful hedge can be made by intermingling different Flowering Shrubs, and clipping, or allowing them to grow naturally.

TREES, SHRUBS, ETC., FOR ORNAMENT.

A detailed description of desirable trees and shrubs would be little less than a recapitulation of the list contained in our Catalogue of Ornamentals, to which readers are referred. A grouping together, according to the times of flowering, or size of growth will, however, be found useful. We would suggest the following as among the most desirable:

Flowering Shrubs—Altheas, blue, purple, red, white, pink and variegated. Almond, pink and white. Calycanthus or Sweet-scented Shrub. Currants, crimson and yellow flowering. Deutzia, white and rose. Hydrangea, pink and white. Plum, double flowering, pink. Japan Quince, red and white. Spireas, white and rose. Syringa, white. Snowball, white. Viburnum Plicatum, white. Wiegela, rose and white.

Variegated and Golden-Leaved Trees and Shrubs—Sambucus, Philadelphus, Privet, Poplars.

Flowering Trees—Magnolias, white and purple. Judas Tree, pink. Peach, pink and white. Laburnum, yellow and purple. Fringe Tree, white and purple. Honey-suckle Tartarian, red and white. Strawberry Tree, red and white. Horse Chestnut, red and white. Cherry, white. Catalpa, white and purple. Thorns, pink, scarlet, red and white.

Cut-Leaved Trees—Imperial Cut-Leaved Alder, Fern-Leaved Beech, Cut-Leaved Birch, Wier's Cut-Leaved Maple.

Purple and Scarlet-Leaved Trees and Shrubs—Purple-Leaved Beech, Purple-Leaved Berberry, Purple-Leaved Birch, Purple-Leaved Elm, Purple-Leaved Filbert, Purple-Leaved Oak, Purple or Blood-Leaved Peach and Plum, Purple, Norway and Sycamore Maples.

Deciduous Upright Trees—Surgar, Norway and Sycamore Maples. European and Oak-Leaved Mt. Ash, Pyramidalis Birch, American Chestnut, Salisburia, Elm, European and White-Leaved Lindens.

Variegated-Leaved Trees and Shrubs—Variegated-Leaved Althea, Variegated-Leaved Cornus, Variegated Honeysuckle, Variegated-Leaved Weigela, Variegated Elder.

Weeping Trees—Willow, Kilmarnock, Birch, Cut-Leaved Weeping and Elegans Pendula, and Young's Weeping, European Ash and Mt. Ash, Linden, Dwarf Weeping Cherry, Poplar, Camperdown Elm.

Evergreens—Among the Shrubs are Mahonia Aquifolia, yellow blossoms; Yews in variety; Rhododendrons, rose, purple and white color; Tree Box, often used for shearing into fantastic shapes; Dwarf Arbor Vitæ; Dwarf or Mountain Pine; hardy and fine colored.

The Norway Spruce and American Arbor Vitæ are the best known of Evergreens. Either as single trees or in hedges they are indispensable. The Black and White Spruce vary in shades of color as their names indicate. The White Pine, light and graceful in its foliage; the Scotch, angular, spreading, irregular, but finely colored; and the Austrian, erect, regular in growth, and bearing upright cones; are well known and desirable. The Balsam Fir is handsome. The Siberian Pyramidal and Arbor Vitæ are improvements on the common American; the first for its strong, thick-leaved foliage, and the other for its fine color and upright regular form. The Golden Arbor Vitæ may also be added. The Irish and Swedish Junipers are compact cones of foliage (the latter light in color), and contrast finely with the round-topped trees.

HEDGES.

The idea of planting hedges for use and ornament, and screens for the protection of orchards, farms and gardens, is a practical one, and rapidly becoming appreciated. In a recent trip among some very intelligent farmers and fruit growers, we noticed that many of them had planted belts of Norway Spruce trees along their entire north and west lines. They were at once beautiful and perfect as wind-breaks. The owners told us that they considered their farms worth ten dollars per acre more in consequence.

They served not only as protection against the fierce winds, but there is much less trouble from the blowing off of the fruit. Some writers tell us that the temperature is warmer in the vicinity of Evergreens. However this may be, we know that our gardens are earlier, and that our fruits ripen better when protected by such screens. Nothing can be more beautiful than ornamental hedges of Evergreens, or shrubs well kept and pruned to serve as boundary lines between neighbors, or as divisions between the lawn and garden, or to hide unsightly places. By using medium-sized plants, a hedge can be made as cheaply as a good board fence can be built, and then, with a little care, it is becoming every year more and more "a thing of beauty." We all know that such hedges continue a principal attraction in our best-kept places.

In the present and constantly-increasing scarcity of timber for fences, we must have some plans of universal adoption for hedges. We believe the Honey Locust combines all the required qualities. It is perfectly hardy, of strong growth, and will grow in almost any soil. It also readily submits to the necessary pruning, so that it can easily be made to assume any desired shape, and being covered with long, hard and very sharp thorns, makes a close, firm and almost impenetrable barrier, that will turn any ordinary farm stock. The Osage Orange is very useful where hardy. Among the plants adapted to ornamental hedges, the American Arbor Vitæ and the Norway Spruce take the first place. We would also recommend for more variety, the Hemlock, Siberian Arbor Vitæ, Japan Quince, Althea, Berberry, Buckthorn, Privet, Spirea, Deutzia, Philadelphus, Box, Red Cedar and Mahonia.

DECIDUOUS TREES.

Alder (*Alnus*).

EUROPEAN (*Glutinosa*)—A tree of rapid growth, suitable for damp soils, but thriving well everywhere.

IMPERIAL CUT-LEAVED—(*Laciniata Imperialis*)—A very striking and beautiful tree, with delicate and beautiful cut leaves; hardy and of vigorous growth; one of the finest cut-leaved trees in cultivation.

Ash (*Fraxinus*).

EUROPEAN (*Excelsior*)—A lofty tree, with pinnate foliage and spreading head.

GOLD BARKED (*Aurea*)—Growth irregular; very ornamental in winter.

Beech (*Fagus*).

LACINIATA (*Cut-Leaved*)—Foliage deeply and finely cut.

PURPLE LEAVED (*Purpurea*)—A remarkable species with deep purple foliage, changing to greenish-purple in Autumn. A very striking contrast with other ornamental trees.

FERN LEAVED (*Heterophylla*)—Of elegant round habit, and delicately-cut fern-like foliage. One of the finest lawn trees.

Birch (*Betula*).

PURPLE LEAVED (*Foliis purpureis*)—A very desirable novelty. With the habits of the Birches, it has beautiful purple foliage, as dark as that of the Purple Beech.

COMMON WHITE (*Alba*)—A well-known variety, with silvery white bark, smooth leaves and pliant branches.

Catalpa.

SPECIOSA—A variety originating at the West; more upright and symmetrical in its growth than the Common Catalpa (*Syringifolia*), and blossoms two or three weeks earlier. Very valuable for timber, fence posts, railroad ties, etc., possessing wonderful durability. A very ornamental and valuable tree.

SYRINGAFOLIA—A native of the South. A rapid-growing, beautiful tree, with very large, heart-shaped leaves, and pyramidal clusters of white and purple flowers a foot long. Late in July.

Cherry (*Cerasus*).

CHINESE or DWARF WHITE FLOWERING (*Sinensis*, *fl. pl.*)—A variety of the Morello with double white flowers.

FLORE ALBA PLENO (*Large Double Flowering Cherry*)—At the period of flowering, a remarkably beautiful and attractive tree. The flowers are so numerous as to conceal the branches, and present to the eye nothing but a mass of bloom, each flower resembling a miniature white rose. A valuable variety deserving of wide dissemination. May.

Elm (*Ulmus*).

AMERICAN WHITE—The noble, drooping, spreading tree of our own woods. One of the grandest of park or street trees.

CAMPESTRIS (English)—More upright and compact habit than American, the leaves are smaller and more numerous.

PURPLE—A beautiful variety; leaves of rich purple color when young.

SCOTCH or WYCH (*Montana*)—A fine, spreading tree of rapid growth; foliage large.

SUBEROSA (Cork-barked)—Bark becomes covered with a fine, dense cork with deep fissures.

Horse Chestnut (*Æsculus*).

ALBA PLENA (Double White)—A superb variety with large spikes of handsome double flowers.

COMMON or WHITE FLOWERING (*Hippocastanum*)—A very beautiful, well-known tree, with round, dense head, dark green foliage, and an abundance of showy flowers in early Spring.

RED FLOWERING (*Rubicunda*)—Not so rapid a grower as the white; foliage of a deep green and blooms later. A very showy tree.

Horse Chestnut Smooth Fruited (*Pavia*)

RED FLOWERING (*Rubra*)—A small-sized tree, with dark red flowers. A very crooked and irregular grower.

YELLOW FLOWERING (*Flava*)—Has pale green leaves, and showy yellow flowers. A fine small tree. A very crooked and irregular grower.

Judas Tree (*Cercis*). Red Bud.

AMERICAN (*Canadensis*)—A small growing tree, covered with delicate purple flowers before the leaves appear.

JAPAN (*Japonica*)—A superb variety from Japan.

Laburnum.

ALPINA (Scotch)—Blooms later than the common, and is somewhat earlier.

COMMUNIS (Golden Chain)—A small tree of irregular shape; bears long, pendent racemes of yellow flowers.

PURPUREA—Fine purple flowers.

Larch (*Larix*).

EUROPEAN (*Europæa*)—An excellent, rapid-growing, pyramidal tree; also valuable for timber. Small branches drooping.

Linden (*Tilia*)

EUROPEAN (*Europæa*)—A very pyramidal tree, with large leaves and fragrant flowers. WHITE or SILVER LEAVED (*Argentea*)—A handsome, vigorous growing tree; large leaves, whitish on the under side, and having a beautiful appearance when ruffled by the wind. One of the best.

RUBRA (Red-Twigged European Linden)—A fine variety with blood red branches.

AMERICAN or BASSWOOD (*Americana*)—A rapid growing, beautiful native tree, with very large leaves and fragrant flowers.

CUT LEAVED (*Laciniata*)—A small-sized tree, with very curious, irregularly divided leaves, and bright red twigs. Distinct and unique. A perfect bouquet in bloom; whitish yellow flowers.

Liquid Amber.

STYRACIFLUA (*Sweet Gum or Bilstead*)—A fine native ornamental tree. The foliage resembles that of the Maple, and changes to a bright red in Autumn.

Magnolia

ACUMINATA—A noble, beautiful tree with very large leaves and yellow flowers, tinted with bluish purple.

CONSPICUA—A beautiful Chinese variety, with large, white flowers, that appear before the leaves.

LENNEI—One of the best varieties; flowers large and of a dark, rich purple color. Not hardy enough for the North.

SPECIOSA (Showy flowered)—Similar habit to the *Soulangeana*; flowers paler and blooms later.

SOULANGEANA—Resembles the foregoing, except that the flowers are tinted with purple, and blooms rather later than *Conspicua*. A most desirable tree for all planters.

Maple (*Acer*).

ACER (Purple-Leaved Norway)—Originated in our nurseries; strong growing lawn tree. Begins purple in Spring and remains purple late in Fall. The best of all purple maples because of hardiness and color.

ASH-LEAVED (*Negundo*)—A fine, rapid-growing variety, with handsome, light green permeated foliage and spreading head; very hardy; excellent for avenues.

WIER'S CUT LEAVED (*Laciniata*)—A silver Maple with remarkable and beautiful dissected foliage. Of rapid Growth; shoots slender and drooping, giving it a very graceful appearance. Should be in every collection.

SYCAMORE (*Pseudo Platanus*)—A large, noble variety, with spacious head and deep green foliage; a free grower, and very desirable as a shade tree.

NORWAY (*Platanoides*)—A distinct foreign variety, with large broad leaves of a deep rich green. Probably the best Maple in cultivation.

PURPLE-LEAVED SYCAMORE (*Purpurea*)—One of the most beautiful and distinctly marked of all; leaves purple red, particularly on the under side. A rapid, strong grower; hardy, and should be in every collection.

SCARLET (*Rubrum*)—A rapid-growing tree, with red flowers very early in the Spring. SCHWERDLERII (*Schwerdler's Maple*)—A beautiful variety, with young shoots and leaves of a bright purplish and crimson color, which changes to purplish green in the older leaves. It is a great improvement on the well-known *Colchicum Rubrum*, the foliage being much brighter and the growth more vigorous.

SILVER LEAVED (*Dasycarpum*)—Of excellent rapid growth, and desirable for immediate effect.

SUGAR or ROCK (*Saccharinum*)—A very popular American tree, and for its stately form and fine foliage, justly ranked among the very best, both for the lawn and avenue.

Mountain Ash (*Sorbus*).

EUROPEAN (*Aucuparia*)—A fine, hardy tree; head dense and regular, covered from July till winter with large clusters of bright scarlet berries.

OAK LEAVED (*Quercifolia*)—A variety with large, hoary, lobed leaves; distinct and fine.

Oak (*Quercus*).

AMERICAN—A tree of coarse growth and foliage, with large and bright-colored foliage.

ENGLISH—White, hardy.

Poplar

POPULUS (*Alba*, *Abele* or *White Poplar*)—The Poplars are all large, rapid-growing trees, and will thrive in any soil. The leaves are on slender foot-stalks and easily stirred by the wind, when the white underside is shown, and produces a fine effect,

BALSAMIFERA (*Tacamahac* or *Balsam Poplar*)—Large foliage, first leaves of a rich gamboge color, turning to deep green beneath; form pyramidal. A valuable tree.

CAROLINIANA (*Carolina Poplar*, or *Cotton Wood*)—A vigorous ornamental shade tree.

FASTIGIATA (*Lombard P.*)—Its tall fastigate form, sometimes reaching 120 feet, makes it indispensable in landscape effects for breaking monotony of outline. Its growth is very rapid.

VAN GERTI (*New*)—Golden leaves of size and character of *Balsam*. A valuable sort

BALLEANA—New; upright; pyramidal silver leaf. Fine for avenues. Strong grower

Peach (*Amygdalus*).

DOUBLE WHITE (*Alba Plena*)—Very ornamental; flowers pure white and double; hardy.

DOUBLE SCARLET—Very ornamental; flowers hardy.

PURPUREA (*Blood-Leaved*)—Leaves are of a deep crimson purple in Spring.

Salisburia (*Maiden Hair Tree* or *Ginkgo*).

ADANTIFOLIA—A singular and beautiful tree; foliage yellowish green, curiously lobed and marked with delicate hair-like lines.

Thorn (*Cratægus*).

DOUBLE WHITE (*Oxyacantha Plena*)—Has small double white flowers.

DOUBLE SCARLET (*Coccinea fl. pl.*)—A fine variety; flowers deep crimson, with scarlet shade; very double, and considerably larger than the double red; fine, rich foliage.

"PAUL'S NEW DOUBLE"—This is a new sort and the best. Flowers are in clusters like verbenas; are very double, large and full, and of a deep, rich crimson.

Tulip Tree.

LIRIODENDRON TULIPIFERA—A native tree of the *Magnolia* order; remarkable for its symmetry, its rich, glossy foliage, regularly distributed branches and large tulip-like flowers.

White Fringe (*Chionanthus Virginica*).

VIRGINICA—Blooms abundantly, bearing curious snow-white fringe-like flowers; is one of the most graceful and pleasing ornaments for the lawn.

WEeping DECIDUOUS TREES.

Ash (*Fraxinus*).

EUROPEAN WEEPING (*Excelsor Pendula*)—The common, well-known sort; one of the finest lawn and arbor trees, covering a great space and growing rapidly.

GOLD-BARKED WEEPING (*Aurea Pendula*)—A singular variety; bark in Winter as yellow as gold.

Beech.

WEEPING (*Pendula*)—Originated in Belgium. Remarkably vigorous; picturesque tree, of large size. Its mode of growth is extremely curious. The trunk or stem is generally straight, with the branches tortuous and spreading. Quite ungainly in appearance divested of their leaves—but when covered with rich, luxuriant foliage, of wonderful grace and beauty.

Birch (*Betula*).

CUT-LEAVED WEEPING (*Lasciniata Pendula*)—An elegant erect tree, with slender drooping branches and fine-cut leaves. A magnificent variety, and worthy of a place on every lawn.

- ELEGANS PENDULA**—A new sort from Europe; habit nearly as pendulous as that of the Kilmarnock Willow.
- YOUNG'S WEeping** (*Pendulo Youngii*)—This variety is of a beautiful pendulous habit, with long, slender shoots of picturesque and irregular form. The leaves are broad, almost heart-shaped, and very pretty. As a small weeping ornamental tree it has no equal. It is a decided acquisition.
- Cherry** (*Cerasus*).
PUMILA (Dwarf Weeping)—Very delicate, drooping branches and tiny leaves and white flowers.
- Elm** (*Ulmus*).
PENDULA (Camperdown)—Its vigorous, irregular branches, which have a uniform weeping habit, overlap so regularly that a compact, roof-like head is formed; the finest Weeping Elm.
- Linden, or Lime Tree** (*Tilia*).
WHITE-LEAVED WEeping (*Alba Pendula*)—A fine tree with large leaves and drooping branches.
- Mountain Ash** (*Pyrus*).
WEeping (*Aucuparia Pendula*)—A beautiful tree, with straggling, weeping branches; makes a fine tree for the lawn, suitable for covering arbors.
- Poplar** (*Populus*).
LARGE-LEAVED WEeping (*Grandidentata*)—A variety having, when grafted standard high, long, slender branches like cords, which droop very gracefully; foliage large, dark shining green and deeply serrated.
- Willow** (*Salix*).
WEeping (*Babylonica*)—Our common and well-known Weeping Willow.
- NEW AMERICAN WEeping** (*American Pendula*)—An American dwarf, slender, branched species, grafted five or six feet high, it makes one the most ornamental of small weeping trees; more ornamental than the Babylonica.
- KILMARNOCK WEeping** (*Caprera Pendula*)—An exceedingly graceful tree, with large, glossy leaves; one of the finest of this class of trees; very hardy.

EVERGREENS.

Arbor Vitæ (Thuja).

- AMERICAN** (*Occidentalis*)—This plant is, all things considered, the finest Evergreen for hedges. It is very hardy, and easily transplanted, few or no plants ever failing if properly-trained specimens are obtained. It grows rapidly and with little care, or rather by easy management, it soon forms a most beautiful hedge, very dense, and perfectly impervious to the sight. Of course it is never adapted to turn stock, but it forms a most desirable and ornamental screen to divide the lawn from other parts of the grounds, or for any other purpose.
- PYRAMIDALIS**—The most beautiful of all the Arbor Vitæ, having dark green, compact foliage and remarkably erect form; perfectly hardy.
- SIBERIAN** (*Siberica*)—Exceedingly hardy, keeping color well in Winter; growth compact and pyramidal; makes an elegant lawn tree; of great value for ornamental trees and hedges.
- Fir** (*Picea*).
BALSAM, or AMERICAN SILVER (*Balsamea*)—A very regular, symmetrical tree, assuming the conical form even when young; leaves dark green above, silvery beneath.
- Juniper** (*Juniperus*).
VIRGINIAN (*Virginica*)—The Red Cedar. A well-known American tree, with deep green foliage; makes a fine ornamental hedge plant.
- IRISH** (*Hibernica*)—Very erect and tapering in its growth, forming a column or deep green foliage; a pretty little tree or shrub, and for its beauty is a general favorite.
- SAVIN** (*Sævina*)—A low, spreading tree, with handsome, dark green foliage; very hardy, and suitable for lawns and cemeteries; can be pruned to any desired shape, and made very ornamental.

Pine (*Pinus*).

AUSTRIAN or **BLACK** (*Austrica*)—A remarkably robust, hardy, spreading tree; leaves long, stiff, and dark green; growth rapid; valuable for this country.

SCOTCH (*Sylvestris*)—A fine, robust, rapidly-growing tree, with stout, erect shoots and silvery green foliage.

WHITE (*Strobus*)—The most ornamental of all our native Pines; foliage light, delicate or silvery green; flourishes in the poorest soils.

Cypress

CUPRESSUS (*Lawsoniana*)—A beautiful evergreen with delicate fern-like foliage from California. Hardy in dry ground.

Spruce (*Abies*).

NORWAY (*Excelsa*)—A lofty, elegant tree, of perfect pyramidal habit, remarkably elegant and rich, and as it gets age, has fine, graceful, pendulous branches; it is exceedingly picturesque and beautiful. Very popular, and deservedly so, and should be largely planted. One of the best Evergreens for hedges.

Spruce (*Abies*).

HEMLOCK or **WEEPING** (*Canadensis*)—An elegant pyramidal tree with drooping branches and delicate, dark foliage, like that of the Yew; distinct from all other trees. It is a beautiful lawn tree and makes a highly ornamental hedge.

Yew (*Taxus*).

ERECT ENGLISH (*Baccata Erecta*)—A very fine pyramidal variety of the English Yew, with dark green foliage; hardy and desirable.

ELEGANTISSIMA—A beautiful tree of small, dense habit; leaves striped with silver, frequently turning to light yellow.

WASHINGTONII—New, vigorous in growth, and rich in healthy green and golden yellow foliage; one of the best.

DECIDUOUS SHRUBS.

Althea or Rose of Sharon (*Hibiscus*).

These are fine shrubs, and especially valuable because of their flowering in the Fall when nearly all other shrubs are out of bloom. Entirely hardy and easy of cultivation.

BOULE DE FEU—A fine new variety, of vigorous growth. Flowers large, very double, and of a beautiful violet red color.

VAR CÆRULEA PLENO—Double blue Althea.

DOUBLE VARIEGATED or **PAINTED LADY** (*variegatus flore pleno*)—Fine double flowering; variegated pink and white.

DOUBLE LILAC (*Pæoniflora*)—Very handsome, double lilac-flowering.

DOUBLE PURPLE (*Purpurea*)—Double, reddish-purple; fine.

DOUBLE RED (*Rubra Pleno*)—Double red flowers.

VIOLACEA (*Flore Pleno*)—Double flower of violet blue color and of medium size.

VARIEGATED-LEAVED DOUBLE PURPLE (*Flore Pleno fol. Variegatis*)—A very showy kind; distinct, leaves variegated with light yellow, flowers double purple; exceptionally fine.

Almond (*Amygdalus*).

DWARF DOUBLE ROSE FLOWERING (*Pumila Rosea*)—A beautiful shrub, with small double, rosy blossoms.

DWARF DOUBLE WHITE FLOWERING (*Pumila Alba*).

Anemone, Japonica (*Alba*)

A very desirable, thoroughly hardy, pure white lawn or garden plant. Grows about 18 inches high. Flowers two inches in diameter. Blooms in the Fall. Very beautiful for cemetery plots.

Berberis (*Berberis*).

COMMON EUROPEAN (*Vulgaris*)—Red fruited.

PURPLE-LEAVED (*Purpurea*)—An interesting and beautiful variety, with violet purple leaves and fruit.

Galecanthus, Sweet Scented Shrub, or Allspice.

FLORIDUS (Sweet-scented Shrub)—An interesting shrub, having a rare and peculiar fragrance of wood and flowers; its blooms are abundant and chocolate color.

Currant (Ribes).

CRIMSON FLOWERING (*Sanguineum*). } Strong growing shrubs with fragrant and
YELLOW FLOWERING (*Aureum*). } abundant bloom.

Deutzia.

ROUGH-LEAVED (*Scabra*)—One of the most beautiful profuse flowering shrubs; white.

SLENDER-BRANCHED (*Gracilis*)—A charming species, introduced from Japan by Dr. Siebold; flowers pure white; fine for pot culture, as it flowers freely at a low temperature in Winter.

CRENATA FLORA PLENA—Flowers double; white, tinged with rose. Fine for hedges.

CANDIDISSIMA (Double white flowering)—One of the finest shrubs, producing snow-white flowers of great beauty, and valuable for bouquets and baskets.

Dogwood (Cornus).

MASCULA VARIEGATA—Leaves striped with pale yellow or white; very beautiful.

CORNELIAN CHERRY (*Mascula*)—Bright yellow flowers in May.

RED BRANCHED (*Sanguinea*)—Very conspicuous and ornamental in Winter, on account of the blood-red bark.

SANGUINEA VARIEGATA (*Elegantissima*)—Perfectly hardy; beautiful variegated foliage and a desirable new sort.

Privet.

VARIEGATED LEAF (*Aurea Var.*)—A new shrub which with its rich, shining golden foliage, retaining all the gloss of the Privet leaf, must make it a favorite with all lovers of shrubs; free grower and bears shearing. Hardy and does not sun-burn.

COMMON—For single plants or hedges. Very fine.

CALIFORNIA—Large leaf. Not hardy in Geneva.

Euonymus—Burning Bush—Strawberry Tree.

A very ornamental and showy shrub, whose chief beauty consists in its brilliant berries, which hang in clusters from the branches until mid-winter; berries rose-colored; planted with a back ground of Evergreens the effect of contrast is very fine.

EUROPÆUS—(*European Euonymus*)—Forms a tree sometimes 30 feet in height. Fruit rose-colored.

Elder (Sambucus).

AUREA—A handsome variety with golden yellow foliage and clusters of pure white flowers; very desirable for ornamenting lawns. Singly and in clumps.

CUT-LEAVED (*Laciniata*)—A fine variety, of vigorous growth, and deeply lacinated foliage.

VARIEGATED-LEAVED (*Variegata*)—A hardy, variegated shrub; very showy and fine. ●

Filbert (Corylus)

PURPLE-LEAVED (*Purpurea*)—A very conspicuous shrub, with large, dark, purple leaves; distinct and fine. Is to shrubs what Purple Beech is to trees.

Forsythia.

VIRIDISSIMA—Leaves dark green; flowers bright yellow, very early in Spring. A fine hardy shrub. Introduced by Mr. Fortune from China.

Honeysuckle, Upright (Lonicera)

RED TARTARIAN (*Tartarica Rubra*)—A well-known shrub; flowers bright pink, which appear in May.

WHITE TARTARIAN (*Tartarica Alba*)—Like the preceding, but has dull, white flowers.

Hydrangea.

LARGE CLUSTERED (*Paniculata Grandiflora*)—A fine, large shrub, bearing showy panicles of pink and white flowers in the greatest profusion. It is hardy, and is altogether a most admirable shrub for planting singly, or on the lawn in masses.

QUERCIFOLIA (Oak-leaved Hydrangea)—A hardy, massive shrub, of woody growth and bushy habit. Leaves lobed like those of the oak, and downy beneath, turning to crimson in Autumn. Flowers white changing to purple.

OTAKSA—Large foliage of a deep green; bears a profusion of deep rose-colored flowers in huge trusses; new and very fine.

THOS. HOGG—A beautiful variety, with large trusses of pure white flowers. Not hardy, but very valuable for forcing.

Lilac (*Syringa*).

CHARLES THE TENTH—A strong, rapid grower, with large shining leaves, and reddish purple flowers.

CHIONANTHUS LEAVED (*Josikea*)—Has dark, shining leaves like the White Fringe Tree, and purple flowers, fine and distinct.

COMMON PURPLE (*Vulgaris Purpurea*).

DOUBLE LILAC (*Lemoinei Flore Pleno*)—A new and choice variety of the Lilac, producing long racemes of double purple flowers, lasting longer than the single sorts. A valuable acquisition.

PERSIAN (*Persica*)—Medium-sized shrub, with small leaves and bright purple flowers.

WHITE PERSIAN LILAC (*Alba*)—A fine sort; white flowers delicately tinged with rose color.

LARGE FLOWERING WHITE (*Alba Grandiflora*)—A beautiful variety; has very large, pure white panicles of flowers. Considered the best.

Plum (*Prunus*).

PRUNUS PISSARDI—In Europe this is pronounced the *coming* Ornamental Tree or Shrub. The wood and leaf are of a rich, peculiarly vivid dark purple, the young growth being bright scarlet, holding the color well through the entire season, and in this respect superior to Purple-leaved Birch. It also produces a black fruit of ornamental appearance, early in the season.

TRILOBA (Double Flowering Plum)—A highly interesting and desirable addition to hardy shrubs; flowers double, of a delicate pink, upwards of an inch in diameter, thickly set on the long slender branches; native of China; hardy.

Purple Fringe, Smoke Tree (*Rhus Cotinus*).

A very much admired and conspicuous shrub or small tree, with spreading habit, so as to require considerable space; covered in mid-summer with a profusion of dusky, fringe-like flowers, desirable for its striking peculiarity of flowering.

Quince, Japan (*Cydonia Japonica*).

SCARLET—An old and esteemed variety, having a profusion of bright scarlet flowers in early Spring, and one of the best early shrubs we have; makes a beautiful and useful hedge.

Snowberry (*Racemosus*).

Has tiny pink flowers succeeded by white berries that hang for months.

Spiræa.

The Spiræas are all elegant, low shrubs, of the easiest culture, and their blooming extends over a period of three months.

BILLARDI—Rose color. Blooms nearly all summer.

CALLOSA ALBA—A white-flowering variety, of dwarf habit; very fine.

DOUBLE-FLOWERING PLUM-LEAVED (*Prunifolia fl. pl.*)—Very beautiful; its flowers are like white daisies; from Japan. Blooms in May. Foliage scarlet in Autumn.

DOUGLASS (Douglas' Spiræa)—Has spikes of beautiful deep rose-colored flowers in July and August.

GOLDEN LEAVED (*Opulifolia*)—An interesting variety, with golden-yellow tinted foliage, and double white flowers in June. Very conspicuous. Strong grower and distinct.

LANCE LEAVED (*Lanceolata*)—Narrow pointed leaves, and large, round clusters of white flowers that cover the whole plant; a charming shrub. Blooms in May.

REEVESII FL. PL. (Reeves' Double)—Flowers white and double; blooms freely in clusters. One of the best.

Syringa (*Philadelphus*).

All the varieties of the Syringa have white flowers, many of them quite fragrant.

AUREA—A new gold leaf shrub of delicate growth and beauty. It is not so fine a grower as the Mock Orange, but is sufficiently free to make it very valuable for clumps and hedges.

GARLAND (*Coronarius*)—The common popular shrub, with pure white, delicately perfumed flowers.

LARGE FLOWERED (*Grandiflorus*)—A conspicuous showy kind, with large flowers and irregular branches.

Tamarix.

AFRICAN (*Africana*)—This is a very beautiful shrub, with small leaves, somewhat like the Juniper, and delicate small flowers in spikes.

Viburnum.

SNOW BALL (*Opulus*)—A well-known, favorite shrub, of large size, with globular clusters of white flowers in June.

PLICATUM (*Plicate Viburnum*)—A rare and exceedingly beautiful species from Japan. Flowers pure white, in large globular heads.

Wiegela.

ROSE COLORED (*Rosea*)—An elegant shrub, with fine rose-colored flowers. Introduced from China by Mr. Fortune and considered one of the finest plants he has discovered. Quite hardy; blossoms in May.

AMABALIS or **SPLENDENS**—Of much more robust habit; large foliage and flowers, and blooms freely in Autumn; a great acquisition.

CANDIDA—New, upright, with pure white flowers.

DEBOISI—A beautiful variety, with deep rose-colored flowers, resembling *Rosea*, but flowers much darker. One of the darkest and best.

HORTENSIS NIVEA—Flowers pure white, retaining their purity during the whole time of flowering. Foliage large, habit vigorous. A very profuse bloomer.

VARIEGATED-LEAVED (*Fol. Variegata*)—Leaves bordered with yellowish white, finely marked; flowers bright pink.

White Fringe (*Chionanthus*).

VIRGINIAN (*Virginica*)—One of the best large shrubs or small trees, with superb foliage, and delicate, fringe-like white flowers.

CLIMBING PLANTS.

Akebia.

QUINATA—A fine rapid growing climber, with dark green leaves, and purple blossoms in early Summer.

Ampelopsis.

VEITCHI—A miniature foliaged creeper which clings with the tenacity of Ivy; beautiful leaves of a glossy green shaded with purple; perfectly hardy, and colors finely in Autumn.

Aristolochia (Birthwort).

SIPHO (Tube flowered, or Dutchman's Pipe)—A twining vine of rapid growth, having large, dark green leaves and curious brownish pipe-shaped bloom.

Bignonia, or Trumpet Flower.

SCARLET (*Radicans*)—A splendid climber, vigorous and hardy, with clusters of large trumpet-shaped scarlet flowers in August.

Honeysuckle (*Lonicera*).

JAPAN GOLDEN-LEAVED (*Aurea Reticulata*)—The most beautiful variety of this class of climbers; leaves of bright green, and golden yellow vines; exquisitely beautiful; fine for bedding, pot culture, or for hanging baskets; perfectly hardy; will give entire satisfaction.

MONTHLY FRAGRANT or **DUTCH** (*Belgica*)—Blossoms all Summer; very sweet.

COMMON WOODBINE (*Periclymena*)—A strong, rapid grower; flowers very showy; red outside, buff within. June and July.

CHINESE TWINING—Holds its foliage nearly all Winter; blooms in July and September, and is very sweet.

HALLEANA (Hall's new)—Nearly evergreen; flowers pure white; produced abundantly; fragrant like a Jasmine.

YELLOW TRUMPET (*Aurea*)—A well-known variety, with yellow trumpet-flower.

SCARLET TRUMPET (*Sempervirens*)—This and its varieties are the handsomest in cultivation. It is a strong, rapid grower, and produces scarlet, inodorous flowers all Summer.

Ivy (*Hedera*).

ENGLISH (*Helix*)—A well-known, old and popular sort.

NEW SILVER STRIPED—Deep green leaves, heavily margined with white; very striking.

VARIEGATED LEAVED (*Fol. Variegated*)—With smaller leaves than the preceding. The Evergreen Ivies often suffer in Winter if exposed to the sun, and should therefore be planted on the north side of a wall or building.

Silk Vine (*Periploca*).

GRÆCA—A graceful, rapid growing vine, with dark, glossy foliage and velvety brown flowers.

Virginia Creeper (*Ampelopsis Quinquifolia*).

A native vine of rapid growth, with large luxuriant foliage, which, in the Autumn, assumes the most gorgeous and magnificent coloring. The blossoms, which are inconspicuous, are succeeded by handsome, dark blue berries. The vine is best calculated to take the place in this country of the celebrated English Ivy, and is really in Summer not inferior to it.

Wistaria.

pendulous clusters of pale blue flowers. When well established, makes an enormous growth; it is very hardy, and one of the most superb vines ever produced.

DOUBLE PURPLE WISTARIA (*Flore pleno*)—A rare and charming variety, with perfectly double flowers, deeper in color than the single, and with racemes of remarkable length. The plant is perfectly hardy, resembling the *Wistaria Sinensis*, so well-known as one of our best climbing plants.

CHINESE WHITE—Introduced by Mr. Fortune, from China, and regarded as one of his greatest acquisitions.

AMERICAN WHITE (*Frutescense*)—A native seedling; pure white. Bunches short. A free bloomer.

MAGNIFICA (*Frutescense*)—Flowers in dense, drooping racemes of the same size as the Chinese, and of a pale lilac color. Vigorous and perfectly hardy.

CLEMATIS.

The Clematis is worthy of the widest dissemination, and a foremost place in every collection.

Since 1862, when the *Jackmanni* was produced in England, the Clematis has grown in favor and interest—new varieties of great beauty having been produced every year since, until now it stands as one of the most popular ornamental plants.

Next to the Rose the Clematis is the most popular flowering plant of the day; entirely hardy, blooming during the entire season, embracing great variety of color, of the most beautiful tints of blue, purple, lavender, scarlet, white, etc.; double and single—some of the flowers being six inches in diameter, and from their wavy, graceful contour, when wafted by a slight breeze, the flowers resemble huge butterflies hovering among the green leaves. They are all climbers, and if trained carefully, attain a height of from five to fifteen feet in one season.

The Clematis is a plant which bears removal and handling remarkably well; it "lives easily," it will do well in any good soil, though best probably in a rich loam; wherever you plant one make the soil rich, if you can. A generous mulching Fall and Spring will ensure a rich harvest of flowers.

We have arranged the varieties now on hand in three classes: first, those that flower from shoots of the current year's growth; second, those that flower only on last year's wood; third, the Double Flowering sorts.

PERPETUALS.

SUMMER AND AUTUMN BLOOMERS, FLOWERING ON SHOOTS OF THE SAME YEAR'S GROWTH

Alexandra—This is one of the continuous sorts of real merit; has a vigorous habit of growth, and in flower is remarkably showy and ornamental. The flowers are large and of a pale reddish violet color. New and desirable. July to October.

Flammula—An old and well-known variety, which is highly prized for the fragrance of its small, white flowers and its remarkably dark green leaves, which remain on the plant very late. A vigorous grower. July to October.

Gipsy Queen—Rich, bright dark velvety purple; very free, late flowering.

Gem—A new and valuable perpetual blooming variety. The flowers are of a deep lavender blue. The parent plant, though much weakened by propagation, had upwards of one hundred flower buds as late as the middle of October. June to October.

Henry—New, and one of the best perpetual hybrids, of robust habit, and a very free bloomer. The flowers are white, large and very showy. July to October.

Imperatrice Eugenie—This is one of the best, if not the best white Clematis. The plant is vigorous and produces flowers profusely, which are of fine form, large and of a pure white. July to October.

Jackmanni—This is perhaps the best known of the newer fine perpetual Clematis, and should have credit of the great popularity now attending this family of beautiful climbers. The plant is free in its form of growth, and an abundant and successional bloomer, producing flowers until frozen up. The flowers are large, of an intense violet purple, remarkable for its velvety richness. Though raised in 1862—since which time many new varieties have been raised and introduced—the Jackmanni has no superior and very few if any equals. July to October.

Jeanne d'Arc—A free-growing vigorous variety. The flowers are very large—seven inches across—of a grayish or French white color, with three bluish veins in each sepal; delicate and beautiful. July to October.

Louis Van Houtte—A strikingly showy variety, with bluish purple flowers. First-class certificate Royal Horticultural Society.

Lord Neville—Flowers large and well formed; color rich dark purple; stamens light, with dark anthers; edgings of sepals finely crimped. First-class certificate Royal Horticultural Society.

Lady Carolina Neville—Beautiful bright mauve, with deeper bars. First-class certificate Royal Horticultural Society.

Languinosa Candida—A variety of the above, having large, delicately tinted, grayish white flowers, which become white after the flowers are fully expanded. One of the best. July to October.

Lawsoniana—A hybrid variety, showy and free, with very large, beautiful rosy-purple flowers, which are produced profusely and in continuous succession. July to October.

Mrs. James Bateman—This is a new variety of great merit; a free successional bloomer continuing throughout the season to yield an abundant crop of its showy blossoms, which are of a reddish lilac, changing to a pale lavender as they become older. July to October.

Otto Froebel—This is a splendid variety with a very robust habit and very large flowers, of a grayish tinted or French white color, and a good form and texture. July to October.

Prince of Wales—This is one of the very profuse flowering varieties of vigorous habit; showy and free. The flowers are of deep purple with a red bar in the center of each flower leaf. First-rate for bedding as well as training up. July to October.

Rubella—One of the finest of the Jackmanni class, having the same habit of abundant and continuous blooming until frozen up. The flowers are large and of a deep velvety claret color; showy and effective. July to October.

Rubra Violacea—This is another of the Jackmanni class, producing flowers in great profusion, which are of a maroon-purple, flushed with reddish violet. One of the best. July to October.

Star of India—A very showy, very free flowering sort with large flowers, first of a reddish plum color, changing in a violet purple, with turkey-red bar in the center of each flower leaf. A distinct variety of great merit. July to October.

- Velutina Purpurea**—This variety has great merit in being the darkest colored Clematis of the class. It has the vigorous, free-blooming character of the Jackmanni. The flowers are large and of a very rich blackish mulberry-purple color. New and choice. July to October.
- Viticella Rubra Grandiflora**—This is the nearest approach to a crimson Clematis yet obtained. The flowers, which are very abundant, are of a dull crimson color, and have green stamens. July to October.
- Viticella Venosa**—A beautiful Clematis, of free growth. The flowers are above medium size; the color is a pleasing tint of reddish-purple, elegantly veined with crimson. July to October.

The following varieties flower in Spring and early Summer, from the old or ripened wood of the previous year's growth:

- Coccinea** (Scarlet Clematis)—Flowers most brilliant scarlet, quite unlike that of any other Clematis. Blooms in July. Very choice and rare.
- Duchess of Teck**—A pure white, with a faint, delicate mauve bar. Awarded first-class certificate by the Royal Botanic Society.
- Fair Rosamond**—Free-growing and handsome. The flower is fully six inches across, and consists of eight sepals. The color is *White* with a bluish cast, having a light bar up the center of each sepal. Flowers very fragrant, and are abundant through June and the first of July.
- Lady Lonsborough**—One of the best of the early flowering Japanese Hybrids. The flowers are large, of silvery gray, with a paler bar in the center of each sepal. June to July.
- Lady Alice Neville**—Color rosy-lilac, with pale mauve bars. Certificate Royal Horticultural Society.
- Miss Bateman**—One of the most charming of the Spring flowering hybrids, having large white flowers, with chocolate red anthers, and somewhat fragrant. May and June.
- Montana**—A remarkably free-growing, exceedingly ornamental, hardy Indian Climber, well adapted for trailing over walls or trellises. The flowers are white, with a dash of pink and tuft of straw-colored stamens. Sweet-scented and very copious—the branches literally becoming converted into floral garlands.
- Standishi**—Introduced from Japan. A remarkably free-growing variety, with beautiful, richly-colored, very finely formed flowers, of a light mauve purple color. One of the best. June.
- Stella**—New. Very showy, one of the choicest. The flowers are of a light violet or deep mauve, with a distinct bar in the center of each sepal of a reddish plum color.
- The Queen**—A new variety, having a free habit and remarkably handsome foliage and flowers of a delicate lavender color.
- Vesta**—Large, of fine form; pure white, with a creamy tinge over the center bar; delicate primrose fragrance. A valuable early bloomer.
- Virginiana**—A very strong grower, having fragrant white flowers. Valuable for covering screens.

DOUBLE SORTS.

- Duchess of Edinburgh**—This is without doubt the best of the double pure whites. Deliciously scented.
- Fortunei**—This was introduced from Japan by Mr. Fortune. The flowers are large, double, white, and somewhat fragrant.
- John Gould Veitch**—Sent from Japan in 1862. The flowers are very handsome, distinct, large, double, and of a light blue or lavender color. It is like Fortunei, except in the color of the flowers. June and July.
- Lucie Lemoine**—New. Flowers white, double, large and well formed; composed of 75 to 90 sepals, very showy. June.

HARDY GHENT AZALIAS.

This class of Azalias are sufficiently hardy for open air culture and will stand our winters without protection, though a mulching of straw or loose litter is desirable, at least until they become established. They are among the most beautiful of flowering shrubs, presenting the best effect where massed in beds. They require no other than an ordinary garden soil, with moderate fertilizing each year. Can be furnished in all colors.

CHINESE AZALIAS.

These are half hardy and require the protection of conservatory, green-house or frame during winter. Otherwise they may be treated the same as the Ghents. Can also be furnished in all colors.

RHODODENDRONS.

These are the most magnificent of all Evergreen Shrubs, with rich green foliage and superb clusters of showy flowers. They flourish best in a rich garden soil, and, like Azalias, are most effective when grouped.

The following varieties are entirely hardy and adapted to a Northern climate.

- | | |
|---|---|
| Album Elegans —Large white flower; an admirable variety and strong grower. | Everestianum —Rosy lilac, with crimped petals and yellow eyes. Very fine. |
| Abraham Lincoln —A superb crimson very fine foliage. | Grandiflorum —Deep rose, inclining to crimson; an abundant bloomer. One of the best sorts. |
| Bertie Parsons —Lilac blush. | Perspicuum —White. |
| Bicolor —Dark rose. | Purpureum —Purple. |
| Bladyanum —A very bright rose. One of the best. | Roseum Elegans —Rosy tinted. Very fine. |
| Catawbiense (Seedling)—Having lilac-colored and red flowers simply. | Roseum Superbum —A good late sort; rose colored. |
| | Speciosum —A light pink; late bloomer. |

CAMELLIAS.

The Camellia is not sufficiently hardy for open-air culture, but requires artificial warmth. It blooms through the Winter and early Spring months, and requires a soil of rich loam and well-rotted compost, thoroughly mixed. Can be supplied in red, white and pink.

EVERGREEN SHRUBS.

Ashberry (*Mahonia*).

HOLLY LEAVED (*Aquifolia*)—A most beautiful shrub, with glossy, holly-like leaves, which change to brownish green in winter, with clusters of bright yellow flowers in May; very hardy, and makes good hedge.

Box, (*Buxus*).

DWARF (*Suffruticosa*)—The well-known variety used for hedging.

TREE BOX—Several sorts.

Euonymus.

RADICANS VARIEGATA—A charming shrub of dwarf and trailing habit; it is perfectly hardy and has foliage beautifully variegated with silvery white, tinted with red in the Winter. Unsurpassed for edging.

ROSES.

HYBRID PERPETUAL AND HYBRID REMONTANT ROSES.

Hybrid or Remontant Roses are perfectly hardy, free and constant bloomers, of all shades of colors from very dark to perfectly white.

To obtain the most satisfactory results, they should be planted in rich, deep, well drained soil, and severely pruned in early Spring, before the buds start.

American Beauty, or Red La France—This valuable rose is of American origin, being introduced by a Washington florist. We consider it a variety that will become as popular as the La France or Marechal Niel. It is equally valuable for forcing or for open-air culture. The flowers are a deep crimson color, of very large size, and the most fragrant of its class. It is a continuous bloomer, of strong constitution.

Anna de Diesbach (Glorie de Paris).—This is a peerless Rose of large size, and although the flowers are so large, they are produced in the greatest abundance. In fact it blooms off and on all through the season. The color is a peculiarly rich dark pink, shaded salmon and most delicious fragrance.

Alfred Colomb—Bright carmine red; clear color, large, deeply built form; exceedingly fine.

Alba Carnea—White, with delicate pink shading. Moderate size; free bloomer; very beautiful.

Baron de Bonstetten—Rich velvety maroon; large, full. A splendid sort, though a shy bloomer in Autumn.

Beauty of Waltham—Almost full; beautiful bright cherry color.

Baronne Prevost—Deep rose; very large and full; a vigorous grower and abundant bloomer; one of the oldest and finest of this class.

Baroness Rothschild—Light pink, cupped form, very symmetrical, without fragrance, very beautiful. A moderate grower only.

Climbing Jules Margottin—Carmine-rose, lightened with pink; full flowers of medium size, very pretty in bud. This is a decided acquisition; the flowers are the same as in the old variety, except that they are a little smaller, and quite as freely produced; the growth is more vigorous.

Countess of Serenye—A seedling from *La Reine*, but shows much of the *Jules Margottin* character. Silvery pink, often mottled; a full, finely shaped globular flower, of medium size; wood light green, foliage darker, thorns red; slightly fragrant; very distinct; not always reliable about opening, but a very free bloomer, and well worthy a place in a small collection. Decidedly one of the finest Autumnal Roses, and also one of the most beautiful for forcing.

Countess of Oxford—A seedling from *Victor Verdier*. Bright carmine, fading in the sun; very large and full; not fragrant. Wood almost thornless; foliage very handsome, large and distinct. Fine in bud; valuable for forcing.

Charles Lefebvre—Fine bright red; center purple shaded; large and globular; one of the grandest roses.

Caroline de Sansal—Clear, delicate flesh color, becoming blush; magnificent variety; the best rose of its color in the catalogue, surpassing even the *Victoria*, which is very similar in color; growth vigorous and foliage luxuriant.

Climbing Victor Verdier—Rosy carmine, purplish edges; showy and very effective.

Empress of India—An imperial rose in every respect; splendid form, very large, full and double; very fragrant; color, dark violet crimson, finely shaded and velvety.

Francois Michelin—Deep carmine rose, very large, full and one of fine globular

form; fragrant and a free bloomer. A seedling from *La Reine*. A very distinct, choice sort; excellent, late in June and July, when other varieties are gone.

Gen. Jacqueminot—Now known everywhere. The best of all forcing Roses of the Hybrid Perpetual class. Hundreds of thousands of feet of glass are exclusively devoted to this one variety. The buds in mid-winter wholesale at from 25 cents to 50 cents apiece. color rich crimson; of fine shape and exquisite fragrance. This grand old variety holds its own against all new comers, and is undoubtedly the finest hardy Rose of its color.

General Washington—Brilliant rosy crimson; large and double; fine; poor grower.

Giant of Battles—Very deep, brilliant crimson center; dwarf habit, free bloomer, and one of the very best.

Her Majesty—This new rose is a cross between the hybrid perpetual *Mabel Morrison* and *Tea Canary*. Its immense size, perfect symmetry and exquisite coloring, combine to make it *the* rose; it is, in a nutshell, the largest and finest rose ever introduced. It will be of special interest to florists who grow roses for the cut blooms, as well as the amateur. The grand flowers of *Baroness Rothschild*, *Paul Neyron*, *Anna de Diesbach*, and others of this class produced of late years, have developed a taste for very large roses, which will be abundantly gratified by "*Her Majesty*." It is of most vigorous growth and hardy. The following extract from the report of a noted authority will convey some idea of its great merit: "It is a delicate-shaded rosy pink; the flowers are of large size and of fine form. This will prove a grand acquisition to rose exhibitors."

Joasine Hanet—Purplish red; very full; blooms in clusters.

John Hopper—Rose, with rosy crimson center; splendid form.

Jules Margottin—Light, brilliant crimson; large, full and beautiful.

Louis Van Houtte—Beautiful maroon; medium size; full, of fine shape; deliciously perfumed.

La Reine—Bright rosy pink; very large, double and sweet; one of the best.

Lord Raglan—Fiery crimson, shaded with purple; large and finely formed. A superb rose and a vigorous grower.

Madame La Charme—White, sometimes faintly shaded with pink, moderately large. A free bloomer in Spring.

Madam Laffay—Rosy crimson, large and double; one of the oldest and best.

Mabel Morrison—A sport from *Baroness Rothschild*. White, changing to pure white; in the Autumn tinged with rose; double, cup-shaped flowers, freely produced. In all save substance of petal and color, this variety is identical with *Baroness Rothschild*. Though not so full in flower as we would like it, it is the best white Hybrid Perpetual raised.

Madame Charles Wood—One of the most valuable Hybrid Perpetual Roses ever introduced. The flower is extra large, full and double; color, deep rosy crimson, sometimes brilliant scarlet, with maroon shading; it blooms soon after planting out and continues to bloom all Summer.

Marquis of Salisbury—Deep rose, with crimson shading. Perfectly imbricated, globular form; a grand Autumnal Rose, and perhaps the finest shape yet raised; a strong, compact habit.

Marchioness of Exeter—A seedling from *Jules Margottin*. Free. Rosy vermilion; size, medium or large; form, semi-globular, full, fragrant. A rose of considerable substance.

Madame Victor Verdier—Bright cherry rose; large compact and finely cupped; blooms in clusters. A free bloomer.

Paul Neyron—Deep rose color; good foliage; by far the largest variety in cultivation.

Pæonia—Cherry red, brilliant; extra fine form, a beautiful rose.

Pierre Notting—Deep velvety crimson. A beautiful, globular-shaped flower, distinct and fine.

Pius the Ninth—Bright purplish red, changing to violet. Very large and full; robust and profuse bloomer; one of the best.

Portland Blanche—Pure white flowers, like *Blanche Vibert*.

Prince Camille de Rohan—Deep velvety crimson, large, moderately full. A splendid rose.

President Lincoln—Dark crimson, medium size, rich. A most prolific bloomer and should be in every collection. Hardy and a fair grower.

Reine Blanche—Pure white, beautifully cupped. Exceedingly beautiful, both in bud and in bloom.

Sir Garnet Waiseley—Vermilion, shaded with bright carmine. Color well maintained throughout.

Sydonie—Blush, large and fine, distinct; a vigorous grower.

Victor Verdier—Clear rose, globular, fine form and free bloomer. Superb.

Victoria—Pale blush, nearly white, very large, full and double. Strong grower and abundant bloomer.

William Griffith—Rosy Lilac, large and beautifully formed, vigorous and profuse bloomer. One of the best.

HYBRID TEA ROSES.

These comparatively new roses are produced by crossing Tea Roses with Hybrid Perpetuals. La France is of this class and is probably more highly prized than any other rose. They are not quite as robust as the Hybrid Perpetuals, but sufficiently so to endure our climate with a little protection in winter.

Captain Christy—Very tender, flesh-colored, center of deeper tint; very large, centifolia rose-shaped; fine.

Coquette des Alps—White, lightly shaded with carmine; of medium size. A free bloomer. One of the best.

Duke of Connaught—Bright crimson, changing to reddish crimson; large, full flowers, without fragrance. A showy, good rose, both in bud and flower.

Duchess of Connaught—Silvery rose, of large globular form, highly scented. Both in color and fragrance this variety resembles La France, but the flowers are more circular and the foliage larger. If it proves sufficiently distinct from La France it will be a great addition.

La France—Delicate silvery rose; very large and full; an almost constant bloomer, equal in delicacy to a Tea Rose; the most pleasing fragrance of all roses; a moderate grower; semi-hardy.

Jean Sisley—Lilac-rose; large or very large; very full, without fragrance. A very free bloomer, always in flower, but having too much substance it is not valuable for forcing, the buds not opening well; probably it will be more useful for open-air culture than for the house.

Pierre Guillot—Bright dazzling crimson, passing to brilliant carmine; petals beautifully veined with pure white; flowers large, very double and full; a free bloomer and very sweet.

BOURBON ROSES.

These are not quite so hardy as the preceding class, requiring slight protection in the North. They are continual bloomers, of vigorous, rapid growth, with rich, luxuriant foliage.

Hermosa—Light blush, or flesh color, large, full and double; grows freely and blooms profusely; fine.

Louise Odier—Fine bright rose, large, full cupped form.

Louis Margottin—Delicate satin rose, fine form; a fine bloomer and a superb new rose.

Queen of Bourbons—Fawn-colored rose, beautiful and profuse bloomer.

Souvenir de la Malmaison—Pale flesh, with a fawn shade; very large, full, beautiful.

NOISETTE ROSES.

These are the finest Autumnal bloomers, and are distinguished by flowering in clusters. They are not quite hardy, requiring a little protection during severe winters.

- Augusta**—Sulphur yellow, large and full, very fragrant, strong grower; similar to, if not identical with, *Solfaterre*.
- Cloth of Gold** (*Chromatella*)—Rich, deep yellow; large, double, fragrant, and a vigorous grower.
- Celine Forestier**—Fine bright yellow, highly fragrant, a strong grower and profuse bloomer; a fine rose.
- Lamarque**—White, with sulphur center, flowers in clusters. A magnificent climbing rose under glass.
- Lady Emily Peel**—Has pure white flowers in large clusters; a free grower and fine for pillars.
- Narcisse**—Pale yellow; a beautiful tea-scented rose.
- Yellow**—Sulphur yellow, rather feeble grower.
- Solfaterre**—Bright sulphur yellow, large and globular.

TEA OR EVER-BLOOMING ROSES.

This class of roses is nearly all hardy south of Washington, and even in the Northern States they can be kept through the winter, out of doors, if protected by a covering of three or four inches of dry leaves. This covering should not be put on until the end of November, as the slight frosts which we may have before that date will do no injury. The Ever-blooming Roses are deservedly the most popular, as their delicious fragrance, delicate tints of color, easy culture and wonderful profusion of bloom make the humblest garden beautiful. The soil for roses can scarcely be made too rich. The richer the soil the larger the buds, and the more of them you will get.

Bon Silene—Purplish carmine.

Catherine Mermet—Bright flesh color, with the same peculiar silvery luster possessed by *La France*; large, full and of beautiful form; decidedly one of the finest Tea Roses.

Cornelia Cook—A seedling from *Devoniensis*. Pale yellowish white, sometimes tinged with flesh; flowers very large and full; not a free bloomer, and often does not open well, but a superb rose when well grown.

Devoniensis—White, with blush center; large and fine.

Duchess of Edinburgh—A very desirable novelty. Flowers of good size, moderately full, deep crimson in the buds, becoming brighter as they expand; good for Winter flowering.

Empress Eugenie—Silvery rose, medium size; full, fragrant; a good variety.

Gloire de Dijon—Yellow, shaded with salmon and rose; large, full and distinct.

Isabella Sprunt—Sulphur yellow, very fine; especially desirable for house blooming.

Marechal Niel—Very bright, rich, golden yellow; very large, full and perfect form; the petals are extra large and of good substance; of vigorous growth and a free bloomer. This is unquestionably the finest of all Tea Roses. Truly magnificent.

Madame Bravy—White, with rose center, large and fine.

Perle des Jardins—No rose of its color ever cultivated for cut flowers up to the present time is now so valuable as this. Tens of thousands of it, covering many acres in glass, are now grown in the vicinity of New York for Winter flowering; it is equally valuable for Summer, as it flowers continuously. Its color is a rich shade of yellow, large size and perfect form, tea fragrance, a healthy, free grower, and unequaled in profusion of bloom, either in the green-house in Winter or in the open ground in Summer.

Pearl (Seeded from President, fertilized with *Comtesse de Serenye*)—Beautiful pale flesh color, or creamy white, delicately tinged with rosy blush; medium size, very full, perfect form; delightfully perfumed.

Reine Marie Henriette—Flowers large, full, of fine form; color, beautiful cherry red with a shade of violet; flowers somewhat flat, highly scented, and in color and form have some resemblance to *Cheshunt Hybrid*; an extra fine climbing variety.

Safrano—Fawn, shaded with rose.

Triomphe de Luxembourg—Salmon buff, shaded with deep rose; distinct and fine.

Yellow Tea—An old and popular rose; very fragrant, straw color; very fine bud.

Sunset—This new rose will eventually supersede many of the older winter-blooming varieties, owing to its productiveness and richness of both foliage and flower; color rich tawny shade of saffron and orange; in habit, identical with the well-known *Perle des Jardins*.

Niphetos—This is the white rose *par excellence*, being unequalled for Winter forcing, and also excellent for Summer flowering. Every shoot produces a bud, which is long and pointed and white as snow.

Wm. Francis Bennett (*New Crimson Tea Rose*)—This rose is worthy of all the praise bestowed on it, and for years to come will maintain its high position. For cutting it is without an equal, the buds being effective in color, of large size, and borne on long stems. In shape the flowers resemble *Niphetos*, rival in coloring the rich glowing crimson of Gen. Jacquimenot, and resemble in fragrance the lovely *La France*. The habit is all that can be desired, being clean, vigorous and productive.

CHINA, OR BENGAL ROSES.

These are very appropriate for beds on account of their dwarf habits of growth. They bloom all through the Summer in open ground, and may be protected through the Winter in a pit or house.

Agrippiana or Cramoise Superior—Rich velvety crimson.

Arch Duke Charles—Rosy crimson, distinct and fine.

Douglass—Rich velvet color, a fine, free bloomer.

Eugene Beauharnais—Bright amaranth; distinct and fine.

Sanguinea—Deep crimson; a most profuse and constant bloomer and free grower.

CLIMBING ROSES.

These are admirably adapted for covering walls, trellises, old trees, unsightly buildings, etc. Their rapid growth, perfect hardiness, luxuriant foliage, immense clusters of beautiful flowers commend them at once to every one.

Baltimore Belle—Fine white with blush center; very full and double.

Gem of the Prairie—A hybrid between the Queen of the Prairie and Madam Laffay. It is a strong and vigorous grower, similar in habit to the Queen, but the flowers are considerably darker in color, besides being quite fragrant. New and a great acquisition.

Greville, or Seven Sisters—Large clusters of bloom, shaded to dark red.

Queen of the Prairie—Bright rose color; large, compact, and globular; a very profuse bloomer. One of the best.

MOSS ROSES.

Ætna—Bright crimson, very double; superb.

Captain John Ingram—Dark velvety purple, full and fine.

Countess of Murinais—White, slightly tinged with flesh. The best white moss.

Crested—Rose; beautiful and curious mossy fringed calyx. Finest of all for buds.

Glory of Mosses—Pale rose, very large, full and beautiful.

Lancii—Rosy crimson, shaded with purple, grows well; superb.

Madam Edward Ory—Reddish carmine, large and full. A very moderate grower; perpetual.

Perpetual White—Pure white, blooms in large clusters.

Princess Adelaide—Blush, becoming quite pale; very double and well formed, the most vigorous grower of all the Mosses.

Salet—Clear rose color, very double, of vigorous growth and abundant bloom perpetual.

Wm. Lobb—Light crimson purple, large and double

SUMMER ROSES.

Auretia—Fine, dark velvety purple; globular and double.

Harrison's Yellow—Not so double as Persian Yellow; bright yellow; very showy and fine.

Magna Charta—Pink, suffused with carmine; full, globular. Foliage and wood light green, with numerous dark spines. A fragrant, excellent rose.

Madame Plantier—One of the finest pure white roses, blooming in clusters.

Persian Yellow—Deep golden yellow; double and very fine.

HEDGE PLANTS.

To secure a good hedge it is necessary to plant well. Dig a wide, deep trench, and work the soil thoroughly into the roots. Stamp the ground firmly so that each plant will be set as solidly as a post, then mulch heavily with loose manure for a distance of one to two feet on either side, according to the size of the plants. This is especially necessary with Evergreens, and all exposure of the roots to the sun and air must be strictly avoided. Evergreens should not be planted in the Fall.

DECIDUOUS HEDGE PLANTS.

Honey Locust.

Very hardy and the cheapest and best for defensive hedges.

Osage Orange.

Highly esteemed at the West and South. Not hardy enough for the Northern States.

Japan Quince.

Unquestionably the first of all plants for an ornamental hedge. Grows very compactly, will submit to any amount of pruning, while the brilliant and showy scarlet flowers make it exceedingly attractive.

The following are also very desirable for ornamental hedging, descriptions of which will be found under the proper headings in this Catalogue:

PURPLE BERBERRY,
SPIREAS,

ROSES,
TARTARIAN HONEYSUCKLE,

ALTHEAS, PRIVET,
DWARF BOX, FOR EDGING.

EVERGREEN HEDGE PLANTS.

AM. ARBOR VITÆ,
MAHONIA AQUIFOLIA,

NORWAY SPRUCE,
HONEYSUCKLES,
SIB. ARBOR VITÆ,

TOM THUMB ARBOR VITÆ, for borders.
HEMLOCK,
PYRAMIDAL ARBOR VITÆ.

PÆONIES.

A splendid class of shrubs, flowering in all shades, from red and lilac to white, with blooms from four to eight inches in diameter. Many of them are very double, and have a delicate and refreshing fragrance; they are easily cultivated and require but little protection.

TREE PÆONIES.

Banksii—Rosy blush, with purplish center; double and fine. Makes a large slow growing shrub, which increases in bloom each year; hardy and very desirable.

HERBACEOUS PÆONIES.

These are very beautiful, showy, and easily cultivated plants, blooming from the beginning of May to the end of July.

MISCELLANEOUS BORDER AND HOUSE PLANTS.

We offer a fine assortment of the best varieties of these useful plants, which are exceedingly valuable on account of their hardiness, easy culture and showy appearance. Most of these will live all Winter in the open ground, and bloom freely every year. We name our leading sorts:

Anemone.

Double and single, white and scarlet; single the most brilliant. Plant five inches apart and cover three inches deep. They flower after the Hyacinths, and continue a long time in bloom. Excellent for cemetery plants.

Carnations.

White, carmine, rosy pink and striped; very beautiful and fragrant, continuing in flower a long time. Plant in pots in Fall, and grow in conservatory or parlor window. One of the best house plants.

Chrysanthemums.

The prettiest of late Autumn and early Winter flowering plants. In November and December there is nothing that will make such a cheerful display. Plant in pots and place them in the house where they will have the sun. The prevailing colors are white, yellow and red.

Daisy (*Bellis*)

Red, white and pink, double and quilled.

Dahlias.

The Dahlia is the grandest Autumn flower we have. Nothing is its equal in any respect in September and October. It is in its glory when everything else is faded or fading, and surrenders only to the Frost King. Put Dahlia tubers in the ground when the season becomes warm, covering the neck some three inches. If many shoots start, thin them out. After flowering, and before hard frosts, take up the plants, remove the tops, dry the bulbs a little, and put in the cellar until Spring, when they can be divided and replanted. Look at them occasionally to see that they are not shriveling from too dry an atmosphere, nor starting the eye early in consequence of too much moisture and warmth.

Dicentra Spectabilis, or Dielytra (*Bleeding Heart*).

A beautiful hardy border plant, with brilliant, rosy, heart-shaped flowers, hanging in great profusion from a gracefully curved stem. May and June.

SUMMER AND AUTUMN FLOWERING BULBS.

THAT REQUIRE TAKING UP IN THE FALL, AND TO BE KEPT FROM FREEZING.

Amaryllis.

FORMOSISSIMA (*Jacobean Lily*)—Flowers large, deep red.

JOHNSONIA—Dull brick red, with a white star center.

Boussingaultia.

BASSILOIDES (*Maderia Vine*)—An old, well-known climber; a rapid grower, with thick, fleshy leaves and white flowers, grand for trailing on a porch, over a window, or in any place where you desire a beautiful green.

Gladiolus.

These are among the most showy and brilliant of all bulbous plants. Nature is nowhere more lavish of her paint than upon the flowers of the Gladiolus. They should be planted out of doors in the Spring—never in the Fall, as the bulbs will not stand freezing. They are, however, excellent for window culture, planted in vases, either singly or in groups.

Tigridias.

SHELL FLOWER—One of our favorite Summer-flowering bulbs, of the easiest culture, displaying their gorgeous, tulip-like flowers of orange and scarlet, daily from July to October.

CONCHIFLORA—Yellow.

PAVONIA—Red.

Tuberose.

DOUBLE WHITE AND SINGLE—Flowers very fragrant. Late Autumn.

PEARL—Its value over the common variety consists in its flowers being nearly double in size; imbricated like a rose, and its dwarf habit, growing only 18 inches to two feet. The fragrance and color same as common sort.

FLOWERING BULBS TO BE PLANTED IN THE FALL.

Crocus—In various colors.

Colchicum Autumnale.

Fritillaria Imperialis.

CROWN IMPERIAL—Very showy plants; are quite hardy and when the bulbs are once planted they need no further culture. Plant five inches deep, one foot apart.

AURORA, CROWN ON CROWN, WILLIAM REX.

SNOW DROP—This is the earliest of Spring flowering bulbs and is universally admired for its elegant snow-white drooping blossoms.

Hyacinths—Among the bulbs used for Winter flowers, the Hyacinth stands foremost on the list. Two methods are employed in flowering the Hyacinth in Winter, one in glasses filled with water, the other in pots or boxes of soil.

Jonquils—Pretty varieties of the Narcissus, having a very agreeable fragrance; adapted to either pots or out-door culture. The bulbs being small, six or eight may be put in a six-inch pot.

Lilium (Lily).

The *Liliums* are entirely hardy, and with a few exceptions quite fragrant and most of the varieties are exceedingly beautiful.

AURATUM (Gold-banded Lily of Japan).

CANDIDUM (common white).

CANDIDUM, fl. pl.—Double white flowering.

LANCIFOLIUM ALBUM (white Japan).

LANCIFOLIUM ROSEUM (rose spotted).

LANCIFOLIUM RUBRUM (red spotted).

TIGRINUM, fl. pl. (Double Tiger Lily)—Bright orange scarlet with dark spots.

LANCIFOLIUM PUNCTATUM—White and pink.

TENUFOLIUM—One of the earliest flowering Lilies; foliage slender and flowers brilliant scarlet. This is a little beauty.

UMBELLATUM—Vivid orange.

Lily of the Valley—The Lily of the Valley is as hardy as any plant can possibly be, and when planted in the open ground will increase pretty rapidly. For the house we have what are called "pips," young roots with flowering stems, that will bloom in a few weeks after planting, and will flower well in baskets of damp moss, or potted. Pips for Winter flowering in the house, we can send out in December, as they will not suffer injury from frost. For the garden we can ship either in the Spring or Autumn.

Narcissus—Garden Varieties.

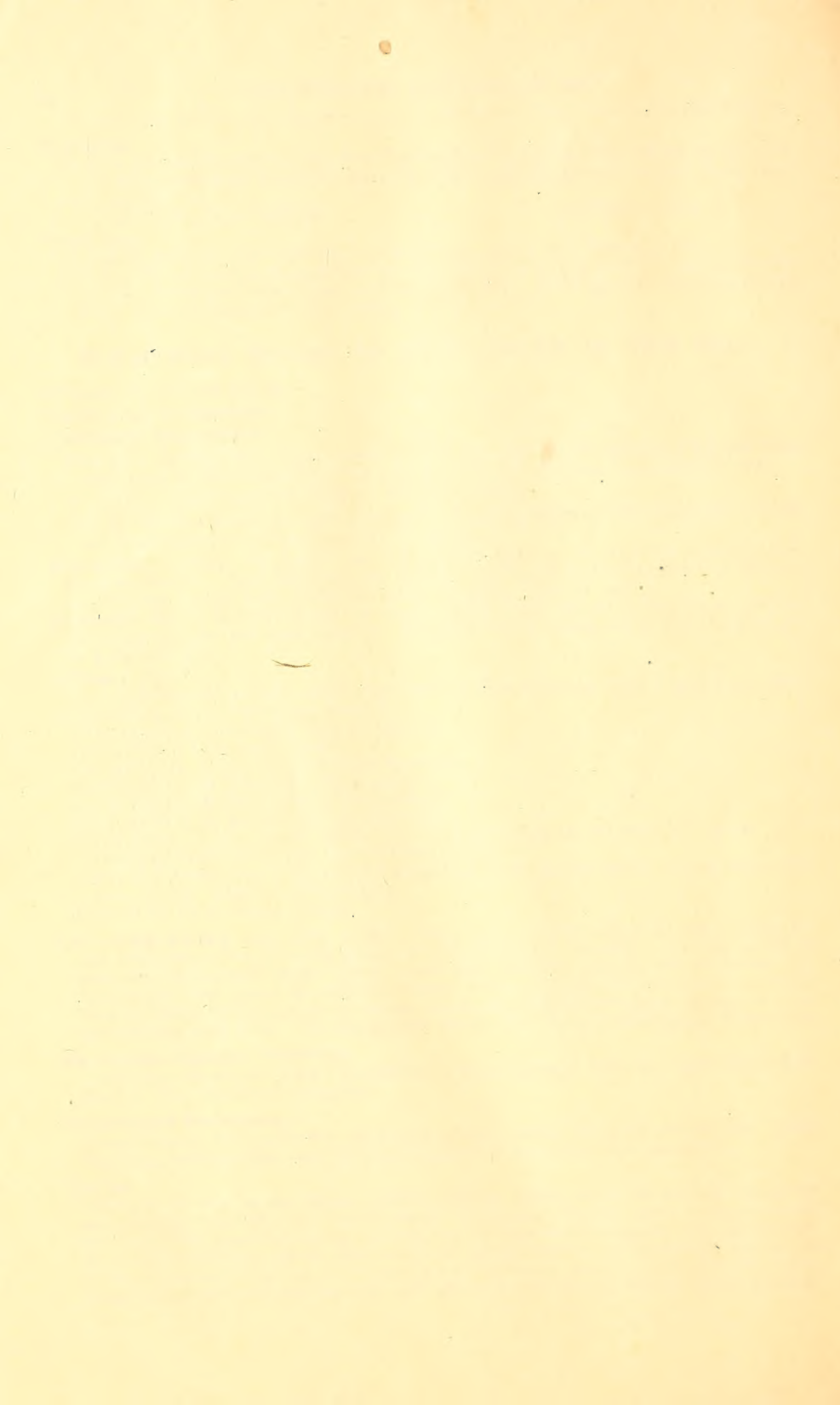
Admirably adapted for garden decoration in early Spring. They are easily cultivated; hardy. Very showy and fragrant.

Polyanthus Narcissus.

Beautiful early Spring flowers, produced in large clusters of white and yellow. Quite fragrant, making them very valuable as parlor or conservatory ornaments.

Tulips.

Owing to the late Spring frosts, bedding plants cannot safely be planted before the early Spring flowering bulbs are through blooming. Without these bulbs, for one or two months of beautiful Spring weather, our gardens would present a bare appearance. We know of nothing that for the amount of money invested will give a more gorgeous show during early Spring, and there is nothing more easily grown than the Tulip. They thrive well in almost any soil. Should be planted during October and November,



CLEMATIS

472

~~392~~

